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FLATHEAD RIVER BASIN ENVIRONMENTAL IMPACT STUDY

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Interim Annual Report for July 1979 through September 1980

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DEPARTMENT OF HEALTH AND
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HELENA, MONTANA 59620

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FLATHEAD RIVER BASIN
ENVIRONMENTAL IMPACT STUDY

Interim Annual Report for
July 1979 through September 1980

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AIR QUALITY BUREAU
ENVIRONMENTAL SCIENCES DIVISION
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June, 1981

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EXECUTIVE SUMMARY

Recognizing the need to protect the high quality environment of the Flathead River Basin, Congress in 1977 directed the Environmental Protection Agency (EPA) to study the possible environmental impacts of resource development in the Flathead River Basin. The study is to be carried out over a five-year period.

This report summarizes the first two and one-half years of air quality and meteorology data collected by the Air Quality Bureau of the Montana Department of Health and Environmental Sciences. Air quality data presented includes particulate levels, particle size, sulfates, nitrates, and visibility. Meteorological data includes surface and upper air wind patterns, stability, and mixing heights.

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I. INTRODUCTION

Recognizing the need to protect the high quality environment of the Flathead River Basin, Congress in 1977 directed the Environmental Protection Agency (EPA) to study possible environmental impacts of resource development in the Flathead River Basin. In response the EPA cooperated with state and local government bodies and interested individuals to establish the Flathead River Basin Environmental Impact Study.

The Flathead Study is directed by a 15-member Steering Committee composed of a representative of EPA, state government, the Confederated Salish-Kootenai Tribal Council, local governments, area citizens, and several federal agencies. The overall goal of the Steering Committee, and of the Flathead Study itself, is to provide a data base to help citizens, government and industry in the Flathead River Basin make decisions concerning the environment. More specifically, the Study will develop the analytical ability to assess potential impacts and provide necessary management tools to control the various levels, types, and locations of developmental activity.

The Air Quality Bureau (AQB) was requested by the Steering Committee early in 1978 to assess the need for additional air quality studies and prepare a proposal for the air quality work. The AQB identified five specific goals or needs for the Flathead Basin air quality studies. These goals were:

1. To quantify the existing air quality within the Basin;
2. To identify existing levels and sources of air pollution which affect the Basin;
3. To quantify the meteorology of the Basin at both low and high altitudes;

4. To develop the capability to assess the effects of man's activities upon the air quality of the Basin; and

5. To develop guidelines to protect and enhance the air quality of the Basin.

The air quality monitoring study plan specifies several objectives, broken down by year for the five study years.

During the initial year of study, June 1978 through June 1979, the upper air meteorological system that had been operating at the Glacier International Airport continued to function. Two surface wind stations also were installed and operated in the area. A contracting meteorologist was hired to handle the instrument operation and data analysis. The following sites were monitored with the samplers listed during 1978:

Moose City (Canadian border) (see Figure 1) - high volume sampler
(total suspended particulate)

Polebridge - dichotomous sampler (particulate sizing instrument)
- surface wind station
- temperature

Kalispell - pilot balloon program (upper level wind flow)
- temperature sonde system (inversion heights and temperature lapse rate)
- acoustic radar (relative stability, mixing heights, and inversion heights)
- surface meteorological system (pressure, wind, temperature, dewpoint
- nephelometer (visibility)
- pyranometer (two wavelengths - total solar radiation)
- pyrheliometer (two wavelengths - direct solar beam)
- dichotomous sampler

Ronan - high volume sampler

Polson - dichotomous sampler

- surface wind system

Several other AQB monitoring sites were continued in operation:

Columbia Falls area - high volume samplers (two)

- surface wind system

Kalispell - high volume sampler

The AQB also provided analysis of the particulate filters for nitrates and sulfates.

During 1979 the various sites started during 1978 were continued. In addition high volume air samplers were installed at the Kalispell Airport, Polson, and Big Fork sites, and particle size instruments were installed adjacent to the high volume samplers in Kalispell and Columbia Falls. These instruments provide valuable data on the amount of respirable and non-respirable suspended dust in the air. In November 1979 the surface wind system at Columbia Falls was moved to Big Fork. A report that summarized the data collected through June 1979 was prepared in September 1979.

In 1980 data collection continued at all sites and a detailed inventory of area and point sources of particulate and SO_2 air pollution in the Basin was prepared. The source emission inventory was submitted to the Steering Committee in June 1980.

This report summarizes data from the air quality and meteorology studies through September 1980.

A second upper air monitoring site was installed at Ninepipe National Wildlife Refuge near Ronan in the fall of 1980. Balloon flights commenced January 5, 1981. The Ronan-Ninepipe site is being operated in cooperation with the Salish-Kootenai air monitoring office. The upper air information collected at the Ronan-Ninepipe site will be added to the data base for the modeling study which will commence in 1981.

II. AMBIENT AIR QUALITY

A. Particulates

Two methods of particulate monitoring have been used in the Flathead Basin Study since its inception. The first method uses a high volume air sampler (Hi-vol). This sampler draws ambient air through a pre-weighed glass fiber filter at a known rate of flow for twenty-four hours (from midnight to midnight) each sample day. Samples are collected every six days. The filter is reweighed after exposure and the difference between the sample and tare weight of the filter is divided by the volume of air sampled to calculate the concentration of particulate in micrograms per cubic meter. The filter used is highly efficient for particles down to .01 microns. The hi-vol shelter construction imposes an upper size limit of 200 microns barring wind effects. This large size range of collected particulates that were suspended in the air (or falling relatively slowly) is the basis of the term "total suspended particulate" which is used to describe hi-vol results. Total suspended particulate (TSP) levels were monitored at five sites in the Basin in 1978, at eight sites in 1979, and at eight sites in 1980 (Table 1, page 23). The map (Figure 1) shows the location of sampling sites used in the Flathead Basin Study.

Table 1 summarize the TSP levels at all sites for the years 1978, 1979, and 1980. The values listed for each site are highest and second highest TSP levels for the year and the arithmetic average. The data clearly shows the influence of population density, industrial and agricultural activities on TSP concentrations. The lowest concentrations are at the Moose City, Columbia Falls - NAAC, and Big Fork Sites while the highest levels are at the Columbia

Falls-Anders, Kalispell, Polson, and Ronan sites. Annual average concentrations for these last four were all above the Montana standard of 75 micrograms per cubic meter during 1979. The nine months of data for these sites during 1980 also show average concentrations in excess of the Montana standard.

Tables 2-A through 2-J show monthly trends in TSP levels at the Hi-vol sites. These levels are also presented graphically in Figures 2-A through 2-J. The sites with low levels of TSP do not show any strong seasonal trends while the sites with high average concentrations show quite significant changes with peaks during late spring, early summer, and the beginning of the fall months. Lower levels are prevalent during late fall, winter, early spring, and late summer months.

The second device used for measuring particulates in the Flathead Study was the dichotomous sampler. This sampler works on the filter technique much as the hi-vol does, but collection is limited to a much smaller size range. Two filters are used, one collects particles less than 2.5 microns in size and one collects particles between 2.5 microns and 15 microns. Particles larger than 15 microns are not collected by the dichotomous sampler so its results cannot be compared directly with hi-vol results. Three sites in the basin were equipped with dichotomous samplers in 1978 and 1979. These were Polebridge, Kalispell-Airport, and Polson. During 1980 two more dichotomous samplers were installed at the Columbia Falls-Anders, and Kalispell-Universal Athletics sites. Data from the dichotomous samplers are presented in Tables 3-A through 3-E. The lowest concentrations of fine particulate are found at the Polebridge site. The Polebridge data shows a seasonal pattern with higher concentrations of both size ranges during the summer months. The percent increase during the summer months is much higher in the large 2.5 to 15 micron size range than that in the less than 2.5 micron range. This shows that concentrations of the larger particles are much more responsive to increased activity levels than that of the small particles. This relationship holds between sites also. Small particulate concentrations (less than 2.5 microns) do not vary nearly as much from site to site as do the large particle (2.5 to 15 microns) concentrations. The highest levels of total fine particulate have been measured at the Columbia Falls - Anders site and the Kalispell-Universal Athletic Site. These sites also have the highest TSP levels. The Polson and Kalispell-Airport sites exhibit similar characteristics and generally have concentration levels between those of the high and low sites.

B. Sulfates and Nitrates

Sulfate and nitrate analysis were performed on the filters from the high volume samplers from all sites except Kalispell-Evergreen. Monthly arithmetic means and maximums of sulfate and nitrate are presented in Tables 2-A through 2-J along with the TSP values. The values are generally highest in the more urban or industrialized areas and lowest in the rural areas. The highest value (12.8 micrograms/cubic meter) was recorded at the Columbia Falls-NAAC site on February 1978. This site has sulfate values similar to those at the Columbia Falls-Anders site even though the TSP levels are only about one fifth as high. This is probably due to the Aluminum plant nearby. The average sulfate values at the Moose City site were the lowest and those at the Kalispell-Strom site the highest.

The nitrate levels were uniformly lower than the sulfate levels but exhibited much the same pattern. The highest nitrate level recorded was 10.9 micrograms per cubic meter in February, 1980 at the Kalispell-Universal Athletics site. The lowest nitrate value recorded was 0.3 micrograms per cubic meter at the Moose City site.

C. Visibility

Visibility related measurements were taken in the Flathead Basin using a variety of techniques. Data was collected from a 5-channel sun photometer, a diffuse radiation system, and an integrating nephelometer. The sun photometer and diffuse radiation measurements were severely affected by the often prevalent fog in the valley and also were only effective during the day. Currently, visibility measurements are taken by the integrating nephelometer which has been in continuous operation since September, 1978.

The nephelometer measures a scattering coefficient over approximately a one meter interval using an artificial light source. Table 4 summarizes the scattering coefficients measured at the Kalispell-Airport site over the length of the study. The results show a strong trend toward higher scattering coefficients and therefore reduced visibility during the winter months. This is due no doubt to the low mixing heights that are prevalent at that time. The scattering coefficients show a strong correlation (0.94) with the concentrations of fine (less than 2.5 microns) particulates measured by the dichotomous sampler at the site during the winter months. The correlation between the two is lower (0.45) during the summer months. This difference may be due to humidity effects during the summer months. The highest mean monthly scattering coefficient was 32 in January, 1979. The lowest was 8 in April, 1980. Montana currently has set a standard for annual average scattering coefficient of no more than 3 in (Prevention of Significant Deterioriation (PSD)) Class I areas.

III. METEOROLOGY

A. Surface Wind

Surface wind data have been collected at eight sites in the Flathead River Basin. Data from January 1978 through September 1980 are considered in this report. Monthly wind roses for these sites are included in the Appendix.

The Brant site, located in a field about 200 yards south of Glacier Park International Airport, was operated from March through May 1978. The most common wind direction was from the south during all three months, with a secondary maximum of wind frequency from the north through north-northeast during March and April. The least common wind direction was east-northeast through east-southeast during all three months. Average wind speeds were light, ranging from 0.5 to 2.5 meters/sec. The strongest winds were generally from the north through north-northeast, while lightest winds were generally from the east. Calm conditions were uncommon, occurring from 0.9 to 3.7 percent of the time.

In June 1978 the Brant site was moved to the second Airport site, which was located adjacent to the parking lot at Glacier Park International Airport. Data were collected at this site until October 30, 1980, when the site was moved to its current location near the U. S. Forest Service's Slurry Bomber Loading Station at Glacier International Airport. The most common wind direction at this site was south-southeast or south during all months except November 1978 and March 1979, August 1979, and January 1980, when north-northeast was most common, January 1979, when the prevailing wind was from the north, and November, 1979 when southwesterly winds prevailed. A secondary maximum of wind frequency was noted during all months except September 1978. This secondary maximun was from the north through north-northeast during most months, except for November 1978 and March 1979, when it was south-southeast, January and May

1979, when it was from the southwest, and October 1979, November 1979, and April 1979, when it was from the northeast. The least common wind directions during all months were east-northeast through east-southeast. Average wind speeds ranged from 0.4 to 6.5 meters/sec and were strongest from the south except for the months November through March, when winds from the north-northeast were strongest. The lowest average wind speeds were from the east during all months. Calm conditions were observed only in April 1979 (0.8%), June 1979 (0.1%), and October 1979 (1.4%). Wind speeds were lowest in the winter months (November through February).

The Columbia Falls-NAAC site is located about two miles north of Columbia Falls, and about one mile north of the Anaconda Aluminum Company. Data was collected there from January 1978 through October 1979. This site is located in a small side valley that drains into the Flathead Valley. It shows a significant diurnal mountain valley wind system that is most notable in the spring and least apparent in the winter. During the nighttime the winds blew down the valley from the northwest through north (41 percent annually) at an average annual velocity of 2.1 m/sec. During the daylight hours, generally starting several hours after sunrise, the winds blew up the valley from the south-southeast through the southwest (27 percent annually) at an average annual velocity of 2.5 m/sec. This event is most dramatic in the spring when the wind speeds are greatest and the directional wind shift most distinct.

The prevailing wind at this site was from the northwest through north during all months except January 1979 (west-southwest) and February 1979 (south). A secondary maximum of wind frequency was observed from the south-southeast through south-southwest during all months except February and April 1978 and January 1979, when it was from the east, and February 1979 when it was from the north. The least common wind direction was east-southeast through south-southeast except for August through October 1978, when northeast through east-northeast were least common, and January through April and June 1979, when winds from the south-southwest through west-southwest were least common. Average wind speeds here were higher than those at other sites in the area, ranging from about one to twelve meters/sec, and averaging three to five meters/sec. The highest average wind speeds were from the east, and the lowest were usually from the southwest through northwest. Calm conditions were observed less than 2 percent of the time, except during June 1978 when they occurred 5.8 percent of the time.

The Polebridge site was located at the Polebridge Ranger Station just inside Glacier National Park. It was in operation only from September 1978 through November 1978. This site showed a bimodal wind direction frequency. The wind blew from the north-northeast to northeast 33 percent of the time at a light velocity of 0.5 meters/sec. This was probably a nocturnal drainage wind down the valley. The other maximum occurred between the south-southwest and west-southwest. The wind blew from this direction 32 percent of the time at an average speed of 1.5 m/sec. The least common wind direction was from the east-southeast through the south-southeast from where the wind blew less than one percent of the time. Calm conditions were noted here about two percent of the time. It was found that the Ranger Station proved to be a poor site location, as it was too close to the main channel of the North Fork of the Flathead River to give a fair distribution of wind directions. The main channel of the river ran on a line southwest from the site, thus accounting for the wind direction maximum from the southwest quadrant. There also proved to be too many tall trees and buldings in the vicinity of the instrument. Strong winds were dampened which resulted in the generally light winds recorded at this site.

The Polebridge site was moved two miles north to Big Prairie, also inside Glacier National Park, in November 1978. The recorder was in operation here for one month, but had to be shut down in December 1978 due to severe winter weather and was not re-started until May 1979. The site was operated until December 1979 and again shut down by weather until June 1980. The Big Prairie location showed wind patterns that were similar to the Ranger Station except that the wind speeds were greater. The primary maximum occurred from the north through the northeast direction. The wind blew from these directions 55 percent of the time at a velocity of about one m/sec. This was probably a nocturnal drainage wind down the valley. The secondary maximum was from the south to southwest (23 percent) at a velocity of 2.7 m/sec, except in May 1979 when the secondary maximum was from the southeast. Another significant wind direction was west-northwest through north-northwest (11 percent) at a velocity of 2.5 m/sec. The least common wind direction was east-southeast to south-southeast (4 percent) at a velocity of about one m/sec. Calm conditions were not observed here in November and December 1978, but occurred 8.8 percent of the time in May 1979 and 6.2 percent of the time in June 1979.

The Geis site was located two miles south of Columbia Falls, a short distance to the east of Highway 35. Data used for this report cover the period from January 1978 through May 1978. The prevailing wind here was from the north in January and February and from the south in March, April and May. A secondary maximum of wind frequency was noted from the south during January and February and from the north during March, April and May. Average wind speeds varied from about one to five meters/sec, with the highest speeds from the south, and the lowest from the east. Calm conditions were never observed here.

The Polson site was located about one mile east of the city of Polson close to the intersection of Highway 93 and Highway 35. Data collection began there in October 1978 and continued until August 22, 1980, when the equipment was moved north of the highway. The prevailing wind at this site was from the south or south-southeast during all months except April 1979, when it was from the north. A secondary maximum from the north-northwest through north-northeast was observed during all months except April 1979, when it was from the south. The least common wind direction was east-southeast or east-northeast during all months except March, when it was southwest. Average wind speeds were low, ranging from about 0.5 to 4 meters/sec. The highest average speeds were from the south, and the lowest were usually from the east. Calm conditions occurred from 0 to 5 percent of the time.

The Big Fork site is located at the Flathead National Forest Ranger Station on a hill just west of Big Fork. Data collection began there in November 1979 and has continued to the present. Average wind speeds have been low, ranging from about 1.5 to 2.5 meters/sec.

Although each of these wind sites are separated by considerable distances, all of them show similar distributions of wind directions. Basically, two maxima occur, one from the north and the other from the south. The primary reason for this is that the axis of each of the valleys in which the sites are located in runs basically on a north-south line. The least common winds were from the east through the southeast. Probably the steep mountain barriers that form the eastern boundary for each of these valleys influences this. Wind directions from the southwest through the northwest are generally evenly distributed.

Strong northeast winds are indicated at both the Airport site and at Columbia Falls-NAAC site. These winds can sometimes be very strong averaging as much as 17 m/sec. This type of wind does not seem to be as significant in the Polebridge-Big Fork areas.

It would appear that Flathead Lake affects the winds at both the Airport location and at Polson. Gusty winds from the south are noticeable during the afternoon hours at the airport. They average between 2.5 to 3.0 m/sec but sometimes they can be as high as 9.0 meters per second. This phenomenon begins in late March and continues through September. The Polson data presented in this report covers the autumn and winter months. The Flathead Lake would tend to be a warm surface at this time of year and should act as a drain for surface winds. This is substantiated somewhat by the dominant wind direction from the south as observed here.

B. Upper Air

Pilot balloons with temperature sondes attached were launched from the airport site six times per week (Monday, Wednesday and Friday at one-half hour after sunrise and at 1400 MST). Monthly summaries of surface and upper level winds were prepared and are included in the appendix of this report. The data available are from the period June 1978 through September 1980.

An analysis of the morning wind summaries indicates that morning surface winds are generally from the north-northwest through north during the summer and autumn months, and from the southeast through south-southeast during the winter and spring months. The only exceptions to this pattern occurred in January 1979 and 1980, when prevailing surface winds were from the north, June 1979, when the prevailing winds were from the west-northwest, and June 1980, when they were north-northeast. Prevailing wind directions at 100 and 200 meters above ground level were generally very similar to those observed at the surface. At 200 or 300 meters, the prevailing wind direction shifted to the southeast through south-southwest during most months and remained nearly constant up to 2000 meters.

During the afternoon soundings the prevailing surface wind direction was southeast through south during nearly all months. The only exceptions were September 1978 and May 1980, when the prevailing winds were from the west-southwest through west, January 1980 when the prevailing winds were from the southwest, and December 1978, when the prevailing winds were from the northeast. Wind directions up to 500 meters above ground level were similar to those observed at the surface. Above 500 meters the wind tended to veer with height, usually becoming west-southwest through west at 1500 meters and generally west through northwest at 2000 meters. Above 1000 meters above ground level, morning and afternoon wind directions were very similar.

Average surface wind speeds during the morning soundings were light, ranging from 0.4 meters/sec in July 1980 to 3.4 meters/sec in December 1978, and averaging about 2 meters/sec. Wind speeds increased sharply with height, becoming two to three times greater at 100 meters than at the surface. Above 100 meters the wind speed generally increased slowly with height, typically becoming 1.5 to 2 times greater at 1500 meters than at 100 meters. A seasonal trend in wind speeds was apparent, with greatest winds at all levels occurring in the winter months and lightest wind speeds occurring during the summer months.

Average surface wind speeds during the afternoons were generally two to three times greater than those in the mornings, averaging from 1.0 to 5.0

meters/sec. A seasonal trend was apparent here too, with the greatest average wind speeds occurring in the autumn and spring months and the lightest winds occurring during the summer and winter. Average wind speeds increased with height, typically becoming about twice as strong at 500 meters as at the surface. Above 500 meters, average morning and afternoon wind speeds were very similar.

From the temperature sonde traces, monthly summaries of inversion base height, thickness, and Holzworth classification were prepared. In the Holzworth scheme, inversions are classified from one to five according to their strength, with one being the weakest and five the strongest (Table 5).

An analysis of the morning inversion summaries indicates that the most common inversion base height was the surface during all months except January 1979, when base heights between 101 and 250 meters were most common. The most common thickness of these surface based inversions was 101-250 meters during most months, except for the winter months, when a thickness of 1-100 meters was most common. The most common thickness of elevated inversions was from 1-100 meters during most months, with a few scattered months having thicknesses of 101-250 meters the most common. The most common Holzworth classification of surface-based inversions was 3 for most months, with the most significant exceptions being in October, November and December 1978, when type 4 inversions were most common. Elevated inversions were generally weaker than surface based ones, with types 2 and 3 being the most common. No seasonal variation was apparent in the strengths of elevated inversions.

The most common inversion base height during the afternoon soundings was from 1001-1500 meters or 1501-2000 meters during most months. The most significant exceptions occurred in December 1978 when bases of 1-100 meters were most common, and February 1979, when surface-based inversions were most common. Surface based inversions did not occur at all except during January and February

1979, and only in February were they common. The most frequently observed thicknes of surface-based inversions was 101-250 meters. The two most common thickness of elevated inversions were 1-100 meters and 101-250 meters during all months, with no obvious seasonal variation in thickness apparent. The most common Holzworth classification for surface-based inversions was one in both January and February 1979. The most common Holzworth classification for elevated inversions was three during the winter months and generally one or two during the other months.

Monthly summaries of mixing height, average wind speed through the mixed layer and average lapse rate below the first inversion were prepared and are included in the appendix of this report. An examination of the mixing height summaries indicates that the most common morning mixing height was from zero to 100 meters during all months except January and February 1979, when it was 251 to 500 meters and March 1979, when mixing heights of 101-250 meters were most common. The afternoon mixing heights also showed a seasonal pattern, with mixing heights greater than 1500 meters being most common during most months, except for December 1978 through February 1979, when mixing heights of 101 to 250 meters were most common and March 1979 when mixing heights of 501 to 750 meters were most frequent.

The distribution of mixing heights has important implications for air quality since it indicates that dispersion would be seriously inhibited during the winter when mixing heights tend to remain low throughout the day.

The average wind speed through the mixed layer in the mornings ranged from 2.2 meters/sec in June 1979 to 6.2 meters in September 1978, and averaged about 4 meters/sec. Highest values were noted in the autumn and spring, and lowest values occurred in the summer. During the afternoon soundings, the average wind speed through the mixed layer ranged from 4.2 meters/sec in March 1979 to 8.0 meters/sec in September 1978, and averaged about 5 meters/sec. No obvious seasonal variation was apparent.

The average lapse rate below the first inversion during the morning soundings varied from -0.66 deg C/100 m in August 1978 to -1.62 deg C/100 m in July 1978, and averaged about -1.0 deg C/100 m. During the afternoon soundings, the average lapse rate below the first inversion ranged from -0.41 deg C/100 m in February 1979 to -2.59 deg C/100 m in July 1978, and averaged about 1.4 deg C/100 m. No seasonal trend was apparent in the morning soundings; however, during the afternoon soundings the winter months appeared to have a lower average lapse rate than did other months.

Average monthly temperature traces showing the average variation in temperature from the surface to 1800 meters above ground level were prepared from the individual pilot balloon runs, and are included in the appendix of this report. These were performed to determine graphically a value for the average monthly morning and afternoon mixing height. One problem in determining average monthly mixing heights has been the uncertainty of how to handle cases of unlimited mixing heights, e.g., cases where the dry adiabat does not intersect the temperature trace. The graphical method used was to plot average temperature versus height, and then to draw a dry adiabat beginning at the surface at a temperature 3 degrees C warmer than the surface temperature for morning traces, or 2 degrees C warmer for afternoon runs. The height at which the dry adiabat intersects the temprature trace is the mixing height. Values of morning and afternoon mixing heights derived in this manner appear in this report (Table 6).

An examination of this table indicates that average morning mixing heights were generally less than 250 meters, except for December 1978 and 1979, February 1979, and 1980, November 1979 and March 1980. A seasonal variation in mixing heights is apparent, with higher values occurring during the winter and lower values occurring in the late summer and early autumn. During the afternoons, average mixing heights were generally greater than 1000 meters, except for the winter months, when average mixing heights were from 200 to 700 meters. Based on these figures, dispersion of pollutants is likely to be most inhibited during the winter, when mixing heights tend to remain low throughout the day.

C. Acoustic Radar

An acoustic radar has been operated at the Kalispell Airport site since late 1976. Data from January 1978 through June 1980 are included in this report. Major losses of data, in June and September 1978, April, July, and October, 1979, and January 1980 occurred due to power surges and other equipment failures.

The monostatic acoustic sounder (or acoustic radar) manufactured by AeroEnvironment, Inc., consists of a transmit/receive dish antenna approximately four feet in diameter and a recording/display unit which produces a permanent chart record. Approximately every 22 seconds the antenna emits a 1600 Hz sound pulse. The pulse is directed vertically upward and is reflected downward to the receiver if stable layers or inversions are present, by small-scale turbulence and temperature discontinuities associated with inversions. The echoes received are recorded electrically on heat-sensitive chart paper. The chart produced is interpreted by the operator, who obtains from it a stability estimate (stable, unstable, or neutral) of the lowest 100 meters of the atmosphere, and the height, thickness, and type of any inversion(s) present. These data are further analyzed by computer, and monthly summaries of first (lowest) and second (second lowest if multiple inversions are present) inversions are produced. A two-hour stability analysis is also performed, which assigns data into one of six stability categories, A through F, where A is the most unstable and F is the most stable. These classifications are based on the operator's stability estimate plus wind speed, time of day, solar altitude angle, and cloud conditions. A more complete discussion of the procedure followed can be found in a report published by the Air Quality Bureau (Gelhaus, 1979). Monthly acoustic radar summaries are included in the Appendix of this report.

First inversion occurrence, base height and thickness are summarized by month in Table 7. During the nighttime hours (0001-0600) inversions were present 85 to 100 percent of the time during all months except November 1978 when they were present only 67 percent of the time. These inversions were most commonly surface based with a most common thickness of 101 to 300 meters. No seasonal variation is apparent.

During the morning hours (0601-1200) a seasonal variation in inversion occurrence is apparent. During the months of October through April, inversions were present 80 percent of the time or more except for November 1978 (60 percent) and October 1978 (79 percent). These inversions were most commonly surface based and between 100 and 500 meters thick. For the warmer months (May through September) inversions were not as frequent during the morning hours, occurring only from 30 to 80 percent of the time. These warm month morning inversions were most commonly elevated from 100 to 300 meters and were most commonly 1 to 300 meters thick.

During the afternoon hours (1201-1800) inversions were uncommon except for the months of November through March when they were present from 26 to 89 percent of the time. The average occurrence frequency for these cold months was 62 percent. These cold season afternoon inversions were most commonly surface based and most commonly 101 to 300 meters thick. For the rest of the year afternoon inversions were present only from 0 to 27 percent of the time. The average occurrence frequency for those warm and hot months was only 12 percent. These warm season afternoon inversions were most commonly elevated from 100 to 300 meters and were most commonly 1 to 300 meters thick.

During the evening hours (1801-2400) inversions were present from 80 to 100 percent of the time, except for March 1979 (69 percent) and May 1980 (77 percent). The evening inversions were most commonly surface based and most commonly from 1 to 300 meters thick with most common thicknesses of 1 to 100 meters occurring in the summer months.

The percent frequency of occurrence of stability classifications of the first 100 meters is presented by month in Table 8. Classes D (neutral) or E (slightly stable) were most frequent for all months except October 1978 when Class F (moderately stable) was most frequent and August 1979 and May and June 1980, when Class C (slightly unstable) was most frequent. Overall classes D and E contain from 44 to 93 percent of available readings. The warmer months have the lowest occurrence of Class D and E, while the winter months are heavily weighted in their favor.

No apparent seasonal variation is apparent in the Class F (moderately stable) distribution which contains from 1 to 28 percent of the available readings.

Class C values were most common in the spring and summer months which contain 13 to 31 percent of the available readings. Class C was much less common in the fall and winter months, when it represented only 0 to 15 percent of the available readings.

There were very few Class B (moderately unstable) readings. They contained only 0 to 7 percent of the available readings and had no apparent seasonal pattern.

Class A (very unstable) readings were very rare occurring only in four months and never representing more than 1.5 percent of the available readings.

The inversion and stability data provided by the acoustic radar illustrate the limited dispersion capacity characteristics of the Flathead Valley. Inversions are present most nights and are often present throughout the day during the winter months. The poor ventilation accentuates the impact of the existing emission sources and produces occasional very high ambient air pollution levels in urban areas. The slow dispersion rates also serve to localize impacts to the area immediately around a source.

IV. SUMMARY

Baseline air quality and meteorology data have been collected in the Flathead River Basin for two and one-half years. An emission inventory and model has been completed. Air quality and meteorological monitoring is being continued. An additional upper monitoring site has been established at Ninepipe National Wildlife Refuse in cooperation with the Salish-Kootenai air monitoring office.

The air quality monitors have shown pollutant levels near population centers, agricultural, and industrial activities to be higher than remote locations. The emission inventory quantifies increased emissions in these areas. The meteorological data which connects the two indicates there is limited dispersion capacity in the Flathead Basin and ambient air quality levels are likely to be strongly tied to local emissions.

The visibility data is closely related to fine particulate levels and mixing heights.

TABLE 1

Flathead Basin TSP Levels
Maximums, (Second High Reading), and [Arithmetic Average]*

Site	1978 Max(2nd)[Ave]	1979 Max(2nd)[Ave]	1980 Max(2nd)[Ave]
Moose City	40 (18)[15]	15 (12)[10]	
Columbia Falls NAAC	59 (56)[25]	64 (63)[29]	81 (65)[29]
Columbia Falls-Anders	425 (423)[134]	484 (390)[145]	455 (422)[123]
Kalispell-Airport		140 (120)[56]	232 (230)[61]
Kalispell-Strom	110 (105)[65]	343 (289)[90]	
Kalispell-Universal Athletic			202 (192)[97]
Kalispell-Evergreen			169 (135)[71]
Big Fork		112 (103)[43]	102 (88)[39]
Polson		202 (191)[80]	519 (177)[78]
Ronan	170 (120)[48]	405 (311)[109]	220 (175)[88]

*All values in microgrms per cubic meter

TABLE 2-A

Moose City
Particulate Data*
Total Suspended Particulates, TSP
Sulfates (SO_4) and Nitrates [NO_3]

	Arithmetic Mean			Maximum Reading		
Month	TSP	(SO_4)	[NO_3]	TSP	(SO_4)	[NO_3]
Sept. 78	18	(1.6)	[0.4]	18	(2.4)	[0.6]
Oct.	26	(1.6)	[0.2]	40	(1.9)	[0.2]
Nov						
Dec	9	(4.5)	[0.3]	17	(6.1)	[0.4]
Jan 79						
Feb	10	(2.9)	[0.2]	12	(4.2)	[0.3]
Mar	10	(2.6)	[0.3]	15	(4.0)	[0.4]

*All values in micrograms per cubic meter

TABLE 2-B

Columbia Falls - NAAC
Particulate Data *
Total Suspended Particulates, TSP
Sulfates (SO_4) and Nitrates [NO_3]

January 1978 - September 1980

	Arithmetic Mean			Maximum Reading		
Month	TSP	(SO_4)	[NO_3]	TSP	(SO_4)	[NO_3]
Jan 78	23	(4.5)	[2.0]	55	(9.6)	[5.6]
Feb	24	(6.2)	[1.1]	47	(12.8)	[2.4]
March	33	(3.1)	[1.6]	42	(6.4)	[2.3]
April	13	(2.4)	[0.4]	21	(3.4)	[0.6]
May	26	(2.6)	[0.5]	46	(4.5)	[1.0]
June	21	(2.3)	[0.3]	33	(3.3)	[0.5]
July	28	(2.7)	[0.5]	48	(4.1)	[0.8]
Aug	29	(3.4)	[0.5]	37	(5.2)	[0.6]
Sep	26	(2.9)	[0.6]	30	(4.6)	[0.9]
Oct	39	(2.8)	[0.6]	59	(5.0)	[1.0]
Nov	24	(3.7)	[1.3]	53	(9.1)	[3.2]
Dec	8	(1.9)	[0.7]	16	(3.5)	[1.8]
Jan 79	32	(5.0)	[1.8]	48	(7.1)	[2.9]
Feb	27			50		
March	21			37		
Apr	22			63		
May	28			44		
June	29			35		
July	30			42		
Aug	32			57		
Sept	33			43		
Oct	33			49		
Nov	34			60		
Dec	31			64		
Jan 80	24			35		
Feb	20			43		
March	17			21		
April	18			28		
May	24			45		
June	31			53		
July	41			81		
Aug	31			53		
Sept	44			65		

*All values in micrograms per cubic meter

TABLE 2-C

Columbia Falls - Anders
Particulate Data*
Total Suspended Particulates (TSP)
Sulfates (SO_4) and Nitrates (NO_3)
January 1978 - September 1980

	Arithmetic Mean			Maximum Reading		
Month	TSP	(SO_4)	[NO_3]	TSP	(SO_4)	[NO_3]
Jan 78	47	(5.1)	[2.3]	78	(9.2)	[5.6]
Feb	80	(5.3)	[1.5]	209	(9.9)	[4.0]
March	292	(3.3)	[1.7]	426	(5.1)	[2.2]
April	137	(2.9)	[0.5]	328	(3.9)	[1.0]
May	157	(2.9)	[0.6]	208	(3.8)	[1.1]
June	117	(2.8)	[0.5]	208	(5.0)	[0.8]
July	154	(3.4)	[0.6]	311	(4.8)	[0.9]
Aug	177	(4.0)	[0.7]	375	(5.2)	[1.4]
Sep	137	(2.9)	[0.8]	186	(4.7)	[1.2]
Oct	165	(3.1)	[1.0]	249	(4.8)	[1.5]
Nov	102	(5.7)	[2.8]	152	(8.2)	[5.1]
Dec	35	(3.1)	[1.6]	58	(4.4)	[4.1]
Jan 79	40	(6.1)	[2.7]	113	(8.3)	[3.7]
Feb	51			79		
Mar	169			353		
April	174			257		
May	205			375		
June	186			261		
July	161			254		
Aug	119			210		
Sep	240			279		
Oct	207			484		
Nov	112			212		
Dec	48			84		
Jan 80	83			188		
Feb	48			81		
March	108			140		
April	139			225		
May	73			122		
June	82			125		
July	189			455		
Aug	131			206		
Sept 80	175			267		

*All values in micrograms per cubic meter

TABLE 2-D

Kalispell - Airport
Particulate Data*
Total Suspended Particulates TSP
Sulfates (SO_4) and Nitrates [NO_3]
March 1979 - September 1980

	Arithmetic Mean			Maximum Reading		
Month	TSP	(SO_4)	[NO_3]	TSP	(SO_4)	[NO_3]
Mar 79	79	(3.2)	[2.8]	120	(4.5)	[5.6]
April	50	(2.3)	[1.1]	117	(4.0)	[1.6]
May	53	(2.2)	[0.9]	74	(3.3)	[1.1]
June	54	(2.0)	[0.9]	69	(2.2)	[1.3]
July	67	(2.3)	[0.8]	89	(2.9)	[1.0]
Aug	61	(2.5)	[0.8]	109	(2.9)	[1.6]
Sep	73	(2.5)	[1.0]	107	(3.2)	[1.2]
Oct	73	(3.1)	[1.5]	140	(3.8)	[1.8]
Nov	38	(3.8)	[2.1]	57	(5.0)	[3.6]
Dec	25	(2.4)	[1.6]	34	(2.9)	[3.0]
Jan 80	36	(3.9)	[2.2]	45	(5.3)	[2.9]
Feb	38	(3.5)	[4.6]	67	(6.4)	[10]
Mar	23	(2.2)	[0.9]	33	(3.5)	[1.6]
April	50	(3.2)	[0.6]	88	(4.5)	[1.0]
May	41	(2.5)	[0.4]	46	(3.8)	[0.6]
June	86	(3.0)	[0.6]	232	(4.9)	[0.8]
July	74	(3.5)	[0.3]	138	(4.8)	[0.7]
Aug	89	(3.8)	[0.3]	230	(4.8)	[0.6]
Sep	90	(4.0)	[0.5]	142	(6.2)	[0.8]

*All values in micrograms per cubic meter

TABLE 2-E

Kalispell - Strom
Particulate Data*
Total Suspended Particulates, TSP
Sulfates (SO_4) and Nitrates [NO_3]
October 1978 - December 1979

	Arithmetic Mean			Maximum Reading		
Month	TSP	(SO_4)	[NO_3]	TSP	(SO_4)	[NO_3]
Oct 78	85	(3.5)	[1.0]	110	(3.9)	[1.2]
Nov	67	(5.8)	[2.5]	99	(8.2)	[4.8]
Dec	43	(4.6)	[1.6]	63	(5.0)	[3.2]
Jan 79	41	(7.6)	[3.0]	59	(8.5)	[4.1]
Feb	58	(5.3)	[3.9]	59	(6.4)	[6.6]
March	164	(4.8)	[2.7]	343	(7.0)	[4.0]
April	147	(4.6)	[1.5]	184	(4.9)	[1.8]
May	107	(2.4)	[1.0]	135	(2.8)	[1.3]
June	63	(2.4)	[0.9]	76	(2.8)	[1.0]
July	95	(2.7)	[0.7]	140	(3.0)	[1.1]
Aug	73	(2.9)	[0.7]	156	(3.6)	[1.3]
Sep	126	(3.7)	[1.2]	208	(6.3)	[2.3]
Oct	-	-	-	-	-	-
Nov	87	(6.0)	[2.9]	136	(9.1)	[5.4]
Dec 79	67	(3.0)	[1.8]	110	(3.6)	[2.9]

*All values in micrograms per cubic meter

TABLE 2-F

Kalispell - Evergreen Elec.
Particulate Data*
Total Suspended Particulates, TSP
Sulfates (SO_4) and Nitrates [NO_3]
June 1980 - September 1980

	Arithmetic Mean			Maximum Reading		
Month	TSP	(SO_4)	[NO_3]	TSP	(SO_4)	[NO_3]
June 80	54			91		
July	78			135		
Aug	58			100		
Sept	103			169		

*All values in micrograms per cubic meter

TABLE 2-G

Kalispell - Universal Athletics
Particulate Data*
Total Suspended Particulates, TSP
Sulfates (SO_4) and Nitrates [NO_3]
January 1980 - September 1980

	Arithmetic Mean			Maximum Reading		
Month	TSP	(SO_4)	[NO_3]	TSP	(SO_4)	[NO_3]
Jan 80	92	(5.3)	[2.0]	137	(6.4)	[2.5]
Feb	72	(4.8)	[5.7]	126	(6.4)	[10.9]
March	169	(4.4)	[1.3]	197	(5.7)	[2.5]
April	116	(4.0)	[0.4]	192	(5.1)	[0.8]
May	119	(4.0)	[0.5]	150	(5.2)	[0.6]
June	81	(2.5)	[0.5]	95	(2.8)	[0.6]
July	93	(3.2)	[0.6]	137	(4.8)	[0.9]
Aug	81	(4.9)	[0.1]	114	(6.5)	[0.5]
Sep 80	142	(5.7)	[1.2]	202	(7.1)	[1.7]

*All values in micrograms per cubic meter

TABLE 2-H

Big Fork
Particulate Data*
Total Suspended Particulates, TSP
Sulfates (SO_4) and Nitrates [NO_3]
July 1979 - September 1980

	Arithmetic Mean			Maximum Reading		
Month	TSP	(SO_4)	[NO_3]	TSP	(SO_4)	[NO_3]
Jul 79	54	(2.4)	[0.5]	67	(2.9)	[0.6]
Aug	47	(2.3)	[0.5]	103	(2.7)	[0.6]
Sept	38	(2.7)	[0.7]	53	(4.0)	[0.9]
Oct	42	(2.9)	[1.2]	57	(3.4)	[1.5]
Nov	40	(4.1)	[2.2]	47	(4.8)	[4.9]
Dec	41	(3.3)	[1.3]	112	(3.9)	[2.3]
Jan 80	60	(5.1)	[2.3]	102	(8.0)	[3.9]
Feb	40	(3.7)	[3.0]	88	(5.5)	[10.2]
March	27	(3.5)	[0.4]	35	(6.5)	[0.8]
April	37	(3.1)	[0.4]	67	(5.2)	[0.8]
May	28	(2.7)	[0.6]	32	(3.2)	[0.8]
June	29	(2.4)	[0.2]	44	(3.2)	[0.4]
July	42	(2.4)	[0.7]	81	(2.8)	[1.4]
Aug	33	(3.5)	[0.1]	52	(5.8)	[0.3]
Sep 80	51	(3.2)	[0.4]	93	(4.2)	[0.8]

*All values in micrograms per cubic meter

TABLE 2-I

Polson
Particulate Data*
Total Suspended Particulates, TSP
Sulfates (SO_4) and Nitrates [NO_3]
March 1979 - September 1980

	Arithmetic Mean			Maximum Reading		
Month	TSP	(SO_4)	[NO_3]	TSP	(SO_4)	[NO_3]
March 79	48	(3.3)	[2.0]	75	(5.0)	[3.3]
April	48	(2.7)	[1.2]	94	(4.0)	[1.7]
May	96	(2.7)	[0.9]	149	(3.1)	[1.2]
June	106	(2.7)	[1.0]	169	(3.6)	[1.8]
July	59	(2.2)	[0.7]	63	(2.8)	[1.0]
Aug	98	(2.4)	[0.6]	188	(2.7)	[0.8]
Sept	133	(3.2)	[1.0]	191	(4.3)	[1.3]
Oct	106	(2.9)	[1.4]	202	(3.5)	[1.6]
Nov	48	(4.6)	[3.9]	71	(6.6)	[5.4]
Dec	30	(2.7)	[1.6]	43	(3.5)	[3.4]
Jan 80	98	(4.1)	[2.1]	177	(5.4)	[3.5]
Feb	40	(3.9)	[1.5]	62	(5.0)	[2.3]
March	27	(3.8)	[0.9]	37	(5.2)	[2.8]
April	74	(3.5)	[0.9]	114	(4.5)	[1.2]
May	152	(2.7)	[0.5]	519	(3.1)	[0.8]
June	47	(3.0)	[0.4]	51	(3.2)	[0.5]
July	-	-	-	-	-	-
Aug	72	(4.8)	[0.2]	83	(6.6)	[0.7]
Sept	83	(4.9)	[0.8]	159	(6.6)	[1.2]

*All values in micrograms per cubic meter

TABLE 2-J

Ronan
Particulate Data*
Total Suspended Particulates, TSP
Sulfates (SO_4) and Nitrates [NO_3]
November 1978 - September 1980

	Arithmetic Mean			Maximum Reading		
Month	TSP	(SO_4)	[NO_3]	TSP	(SO_4)	[NO_3]
Nov 78	85	(4.1)	[2.0]	170	(6.5)	[4.2]
Dec	19	(3.4)	[1.0]	32	(4.1)	[2.4]
Jan	36	(6.9)	[3.8]	58	(10.8)	[6.3]
Feb	49	(4.2)	[2.5]	64	(8.1)	[6.6]
March	76	(3.9)	[2.2]	123	(5.3)	[4.1]
April	94	(2.1)	[0.8]	168	(3.8)	[1.5]
May	130	(1.9)	[0.9]	147	(2.6)	[1.4]
June	227	(2.0)	[0.8]	311	(2.0)	[1.0]
July	204	(2.2)	[0.9]	224	(2.4)	[1.1]
Aug	140	(2.1)	[0.7]	240	(3.2)	[1.2]
Sept	176	(2.3)	[0.9]	288	(2.8)	[1.3]
Oct	137	(2.5)	[1.3]	406	(2.9)	[1.6]
Nov	27	(3.4)	[2.6]	29	(4.8)	[6.3]
Dec	53	(3.0)	[2.1]	69	(4.5)	[4.1]
Jan 80	61	(4.3)	[1.9]	140	(7.5)	[2.7]
Feb	89	(3.8)	[2.8]	168	(4.6)	[5.6]
March	88	(4.0)	[0.5]	106	(5.4)	[0.6]
April	146	(2.5)	[0.4]	220	(3.6)	[0.9]
May	56	(2.9)	[0.8]	80	(3.1)	[0.9]
June	61	(3.4)	[0.6]	88	(4.1)	[0.8]
July	74	(3.7)	[0.4]	120	(4.5)	[0.6]
Aug	-	-	-	-	-	-
Sept	-	-	-	-	-	-

*All values in micrograms per cubic meter

Moved to Ninepipes after 8/7 run and set for 10/18 run

TABLE 3-A

Polebridge
Fine Particulate Data*
Monthly Means and Maximums
September 1978 - September 1980

Month	Less than 2.5 microns		2.5 to 15 microns		Less than 15 microns	
	Mean	Maximum	Mean	Maximum	Mean	Maximum
Sept 78	14.1	21.1	6.3	7.0	20.4	26.5
Oct	13.4	24.1	6.5	13.2	19.9	36.8
Nov	9.5	15.7	5.3	7.3	14.9	23.0
Dec	6.5	8.1	2.6	3.2	9.1	11.2
Jan 79	7.9	9.9	2.2	2.4	10.0	12.0
Feb	5.2	9.5	0.8	1.4	6.0	9.5
March	6.7	9.5	1.4	2.6	8.1	12.1
April	8.3	16.0	5.7	19.4	14.0	35.4
May	7.4	9.4	6.4	10.7	13.8	20.2
June	5.1	7.0	13.2	24.1	18.3	38.4
July	10.2	17.3	46.8	88.6	57.0	106.0
Aug	11.7	11.7	24.7	25.1	36.4	36.7
Sept	10.6	14.7	18.0	19.6	28.6	32.7
Oct	14.2	24.7	7.2	16.1	23.4	33.4
Nov	16.2	22.5	4.5	10.6	20.7	27.1
Dec	4.8	6.1	2.0	5.4	6.8	9.8
Jan 80	8.3	12.2	3.1	10.2	11.4	16.9
Feb	6.6	11.7	1.0	4.5	7.6	11.7
March	5.5	7.6	1.0	2.0	6.5	9.0
April	8.0	9.4	3.1	7.3	11.1	16.7
May	8.1	10.1	7.4	12.0	15.5	21.6
June	4.9	5.5	9.4	13.9	14.3	19.0
July	2.1	3.0	5.1	8.2	7.2	11.2
Aug	0.8	1.5	2.3	3.5	3.2	4.6
Sep 80						

*All values in micrograms per cubic meter

TABLE 3-B

Columbia Falls - Anders
Fine Particulate Data*
Monthly Means and Maximums
January 1980 - September 1980

Month	Less than 2.5 microns		2.5 to 15 microns		Less than 15 microns	
	Mean	Maximum	Mean	Maximum	Mean	Maximum
Jan 80	30.8	44.7	31.3	62.7	62.1	87.7
Feb	17.7	23.5	6.1	6.4	23.8	29.3
March	8.1	9.0	39.9	96.0	44.8	105.0
April	32.1	94.9	80.4	118.1	112.5	129.1
May	10.8	12.5	46.3	92.2	57.1	103.7
June	11.9	15.5	61.7	150.0	73.6	165.6
July	16.6	28.0	82.6	197.3	99.2	223.8
Aug	10.6	14.0	47.1	90.8	53.3	102.8
Sep 80	14.6	24.5	82.1	136.6	97.6	161.1

*All values in micrograms per cubic meter

TABLE 3-C

Kalispell - Airport
Fine Particulate Data*
Monthly Means and Maximums
September 1978 - September 1980

Month	Less than 2.5 microns		2.5 - 15 microns		Less than 15 microns	
	Mean	Maximum	Mean	Maximum	Mean	Maximum
Sept. 78	15.0	16.7	15.7	24.0	30.7	41.1
Oct.	19.1	40.4	23.1	49.7	42.2	85.1
Nov.	14.5	29.5	9.9	17.1	24.4	12.7
Dec.	7.7	12.1	10.8	12.9	18.5	19.4
Jan. 79	27.5	40.1	7.0	10.7	34.5	50.8
Feb. **	9.9	9.9	11.7	11.7	21.6	21.6
March**	9.4	9.4	6.3	6.3	15.7	15.7
April	10.8	23.0	18.8	54.0	29.6	77.1
May	11.6	15.0	25.9	39.8	37.6	50.8
June	11.4	17.0	29.3	61.5	40.7	73.7
July	13.5	19.7	31.1	43.4	44.6	63.1
August	12.2	28.7	24.0	43.3	36.1	72.0
Sept.	19.4	28.7	32.7	48.8	52.1	77.5
Oct.	27.7	41.4	33.1	68.1	60.7	109.5
Nov.	25.1	39.6	45.1	198.4	70.2	218.1
Dec.	12.7	18.0	10.9	21.6	23.7	34.3
Jan. 80	22.0	28.3	15.5	29.4	37.5	48.9
Feb.	23.7	37.9	6.1	12.1	29.8	42.4
March	7.1	10.8	14.9	39.3	22.0	50.1
April	10.4	14.3	24.8	43.7	35.2	58.0
May	10.2	13.8	22.8	45.1	33.0	58.9
June	12.5	23.0	37.1	109.9	49.6	132.9
July	17.8	27.2	50.3	100.5	68.1	121.5
Aug	14.0	23.9	47.0	174.3	61.0	198.2
Sept	17.3	24.1	47.1	84.1	64.5	108.3

*All values in micrograms per cubic meter

**one value only

TABLE 3-D

Kalispell - Universal Athletics
Fine Particulate Data*
Monthly Means and Maximums
January 1980 - September 1980

Month	Less than 2.5 microns		2.5 to 15 microns		Less than 15 microns	
	Mean	Maximum	Mean	Maximum	Mean	Maximum
Jan 80	32.0	42.3	22.8	44.0	54.8	7.15
Feb	23.9	28.2	31.4	54.6	55.3	82.8
March	14.4	17.3	44.2	63.6	58.6	78.5
April	13.1	16.8	46.4	71.9	59.5	88.7
May	8.8	10.7	40.4	63.8	49.2	70.3
June	8.6	10.4	45.4	52.0	54.0	62.4
July	27.7	79.6	81.5	203.5	109.2	283.1
Aug	33.4	80.8	37.6	53.9	71.1	106.8
Sep 80	15.9	18.8	58.6	84.2	74.6	103.1

*All values in micrograms per cubic meter

TABLE 3-E

Polson
Fine Particulate Data*
Monthly Means and Maximums
September 1978 - September 1980

Month	Less than 2.5 microns		2.5 - 15 microns		Less than 15 microns	
	Mean	Maximum	Mean	Maximum	Mean	Maximum
Sep 78	15.1	16.8	21.8	29.8	36.9	46.6
Oct	16.1	30.4	49.9	90.1	65.9	99.6
Nov	14.1	27.3	19.9	29.3	34.0	53.5
Dec	8.7	9.6	14.1	20.0	22.8	27.2
Jan 79	24.2	35.5	5.3	7.9	29.5	41.2
Feb	11.8	18.2	15.9	27.5	27.6	45.7
Mar	8.4	16.8	12.7	14.3	31.1	31.1
April	15.9	24.0	34.3	52.4	50.1	76.4
May	26.1	76.7	39.1	89.9	65.1	105.7
June	13.2	22.1	47.8	90.7	61.0	102.7
July	8.3	10.1	29.1	33.1	37.4	43.2
Aug	10.7	14.4	59.8	143.9	70.5	158.2
Sept	15.6	24.9	68.1	100.6	83.8	125.5
Oct	19.5	24.9	32.9	74.0	52.4	92.4
Nov	20.0	24.6	8.9	14.2	29.1	33.0
Dec	10.8	18.9	4.7	13.8	15.5	21.4
Jan 80	11.3	17.8	22.3	59.3	33.6	77.1
Feb	7.7	14.1	7.1	14.2	14.9	28.3
March	1.3	1.6	11.9	30.1	13.2	30.6
April	7.8	14.0	19.4	33.3	28.0	44.0
May	10.4	14.6	26.6	54.7	36.9	66.5
June	7.6	10.2	19.6	25.2	27.5	35.4
July	16.9	24.8	47.0	84.3	63.9	109.1
Aug	21.6	27.0	13.9	26.1	35.5	53.1
Sep 80	23.4	32.8	6.6	10.6	30.1	34.0

*All values in micrograms per cubic meter

TABLE 4

Kalispell-Airport
Visibility Data (Nephelometer)
Scattering Coefficients X10^{-5}
Monthly Means and Maximum
September 1978 through September 1980

Month	Mean	Maximum
September 78	9	29
October	16	41
November	16	52
December	14	48
January 79	32	66
February	17	75
March	15	39
April	11	31
May	10	27
June	11	21
July	13	43
August		
September		
October	13	46
November	21	46
December	14	45
January 1980	18	52
February	23	65
March	10	39
April	8	25
May	6	17
June	7	17
July	7	41
August	7	15
September 80	8	23

TABLE 5

Holzworth Lapse Rate Categories (Modified)
Values in deg C/100m

Non-Inversion Class	Lapse Rate	Description
1	>-1.60	Very Superadiabatic
2	-1.21 to -1.60	Superadiabatic
3	-0.81 to -1.20	Near Dry Adiabatic
4	-0.41 to -0.80	Near Standard Atmosphere
5	0.00 to -0.40	Weak Lapse

Inversion Class	Lapse Rate	Description
1	0.00 to +0.47	Weak Inversion
2	+0.48 to +1.14	Moderate Inversion
3	+1.15 to +2.82	Strong Inversion
4	+2.83 to +6.00	Very Strong Inversion
5	>+6.00	Extreme Inversion

(Holzworth, 1974)

TABLE 6

Average Monthly Morning and Afternoon Mixing Heights (meters)
from Average Monthly Temperature Traces

Kalispell-Airport Site
July 1978 through September 1980

Month	Morning 1978	(1979)	[1980]	Afternoon 1978	(1979)	[1980]
Jan		(115)	[248]		(195)	[515]
Feb		(315)	[340]		(200)	[678]
Mar		(95)	[790]		(980)	[1594]
April		(150)	[242]		(>900)	[1818]
May		(90)	[206]		(1500)	[1274]
June		(85)	[87]		(>1500)	[1910]
July	135	(210)	[104]	1300	(1675)	[>1600]
Aug.	75	(190)	[95]	>1800	(1811)	[>1600]
Sept.	100	(190)	[65]	>1800	(2003)	[>1600]
Oct.	50	(225)		1420	(1258)	
Nov.	135	(496)		>1200	(946)	
Dec.	815	(500)		515	(606)	

Table 7

Kalispell Airport Site
First Inversion Occurrence Frequency (percent)
Most Common Base Height and Thickness by Time and Month
from Acoustic Radar

Month		0001-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
				Thickness			Thickness			Thickness			Thickness
		(%)	Base	Code*	(%)	Base	Code*	(%)	Base	Code*	(%)	Base	Code*
1978	Jan	(93)	scf	2	(85)	sfc	2	(75)	sfc	2	(93)	sfc	2
	Feb	(96)	scf	2	(100)	sfc	3	(46)	sfc	2	(86)	sfc	2
	Mar	(100)	sfc	2	(90)	sfc	2	(26)	sfc	2	(94)	sfc	2
	Apr	(100)	sfc	2	(80)	200	1	(14)	200	1	(100)	sfc	2
	May	(95)	sfc	2	(68)	sfc	1	(10)	300	-	(80)	sfc	2
	Jun												
	Jul	(96)	sfc	2	(79)	300	1	(8)	300	1	(100)	sfc	1
	Aug	(96)	sfc	2	(32)	300	1	(0)	--	-	(82)	sfc	1
	Sep												
	Oct	(95)	sfc	2	(79)	sfc	2	(25)	300	1	(100)	sfc	2
	Nov	(67)	sfc	2	(60)	sfc	2	(67)	sfc	2	(87)	sfc	2
	Dec	(87)	sfc	2	(81)	sfc	2	(58)	sfc	2	(94)	sfc	2
1979	Jan	(84)	sfc	2	(84)	sfc	3	(77)	sfc	2	(87)	sfc	2
	Feb	(92)	sfc	2	(92)	sfc	2	(77)	sfc	2	(92)	sfc	2
	Mar	(100)	sfc	1	(63)	sfc	2	(89)	300	1	(67)	sfc	2
	Apr												
	May	(87)	sfc	2	(39)	sfc	2	(3)	sfc	1	(83)	sfc	2
	Jun	(95)	sfc	2	(30)	--	2	(10)	--	-	(100)	sfc	1
	Jul												
	Aug	(95)	sfc	3	(53)	200	2	(5)	--	-	(89)	sfc	2
	Sep	(86)	sfc	3	(54)	200	2	(8)	200	2	(92)	sfc	2
	Oct												
	Nov	(90)	sfc	2	(89)	sfc	2	(35)	300	2	(90)	sfc	2
	Dec	(94)	sfc	2	(84)	sfc	2	(48)	sfc	1	(87)	sfc	2
1980	Jan												
	Feb	(86)	sfc	2	(82)	sfc	2	(68)	sfc	2	(86)	sfc	2
	Mar	(87)	sfc	2	(94)	sfc	2	(77)	sfc	2	(87)	sfc	2
	Apr	(100)	sfc	3	(87)	100	3	(290)	200	2	(100)	sfc	2
	May	(81)	sfc	3	(65)	100	2	(19)	--	2	(77)	sfc	2
	Jun	(93)	sfc	3	(83)	100	2	(27)	--	1	(93)	sfc	2

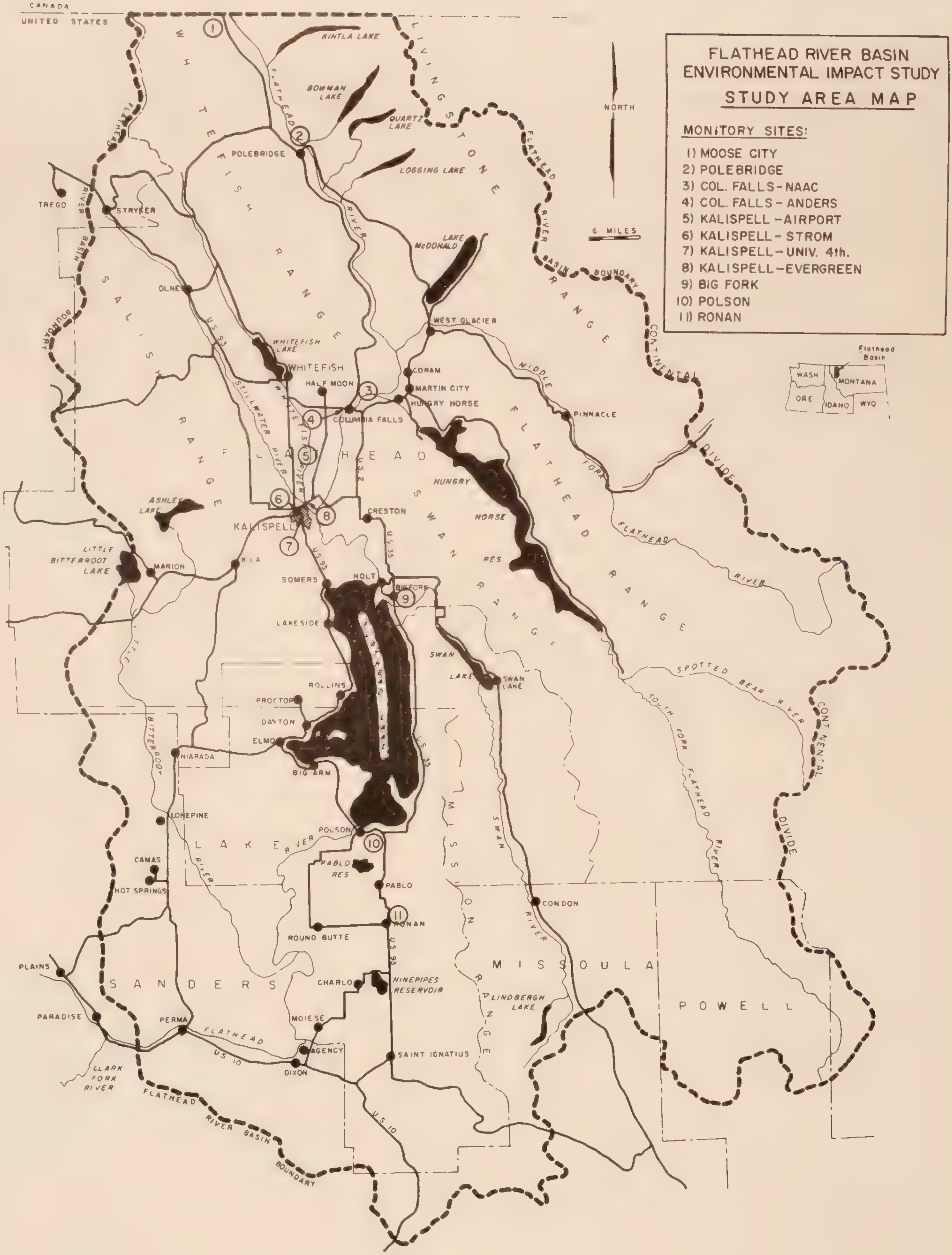
*Thickness Code:
1 - 1-100 meters
2 - 101-301 meters
3 - 301-500 meters
4 - 501-900 meters

TABLE 8
Kalispell Airport Site
Percent Frequency of Occurrence of Stability Classification by Month

Category

Month		A	B	C	D	E	F	U	M
1978	Jan	0.0	0.0	1.9	34.1	48.1	4.6	0.0	11.3
	Feb	0.0	1.2	6.8	28.9	57.4	5.7	0.0	0.0
	Mar	0.0	4.0	14.5	22.8	45.4	13.2	0.0	0.0
	Apr	0.0	0.6	16.7	19.4	21.4	9.2	1.1	31.7
	May	0.6	1.1	7.8	29.8	16.9	5.4	1.1	37.4
	Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	Jul	0.3	2.4	21.5	23.7	11.3	18.8	0.8	21.2
	Aug	0.0	1.3	21.8	32.8	14.5	17.7	0.8	11.0
	Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	Oct	0.0	3.2	9.4	16.7	15.6	17.7	0.3	37.1
	Nov	0.0	3.3	5.3	52.5	29.2	9.7	0.0	0.0
	Dec	0.0	1.1	1.9	58.1	28.5	10.5	0.0	0.0
1979	Jan	0.0	0.3	0.0	50.8	28.2	16.1	0.0	4.6
	Feb	0.0	0.0	0.0	32.4	10.7	3.0	0.0	53.9
	Mar	0.0	0.0	2.2	20.4	3.8	0.3	0.0	73.4
	Apr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	May	0.0	1.1	18.0	51.1	17.2	11.3	0.0	1.3
	Jun	0.3	1.4	17.8	25.0	14.4	8.6	0.0	32.5
	Jul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	Aug	0.0	0.8	19.1	17.5	10.8	13.2	0.0	38.7
	Sep	0.0	0.8	10.6	16.9	6.4	9.4	0.0	55.8
	Oct	0.0	0.0	0.0	0.0	010	0.0	0.0	100.0
	Nov	0.0	4.7	6.4	29.2	17.2	8.3	0.0	34.2
	Dec	0.0	0.8	0.0	45.4	51.3	2.4	0.0	0.0
1980	Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	Feb	0.0	1.8	3.9	13.4	63.4	8.3	0.0	9.2
	Mar	0.0	0.0	0.0	45.4	47.3	5.4	0.0	1.9
	Apr	0.0	3.9	30.3	14.7	35.8	15.3	0.0	0.0
	May	0.0	4.0	24.5	16.9	19.9	14.0	0.0	20.7
	Jun	1.1	4.4	29.2	20.3	25.6	18.1	0.0	6.4

A	Very unstable	E	Slightly Stable
B	Moderately Unstable	F	Moderately Stable
C	Slightly Unstable	U	Unknown
D	Neutral	M	Missing



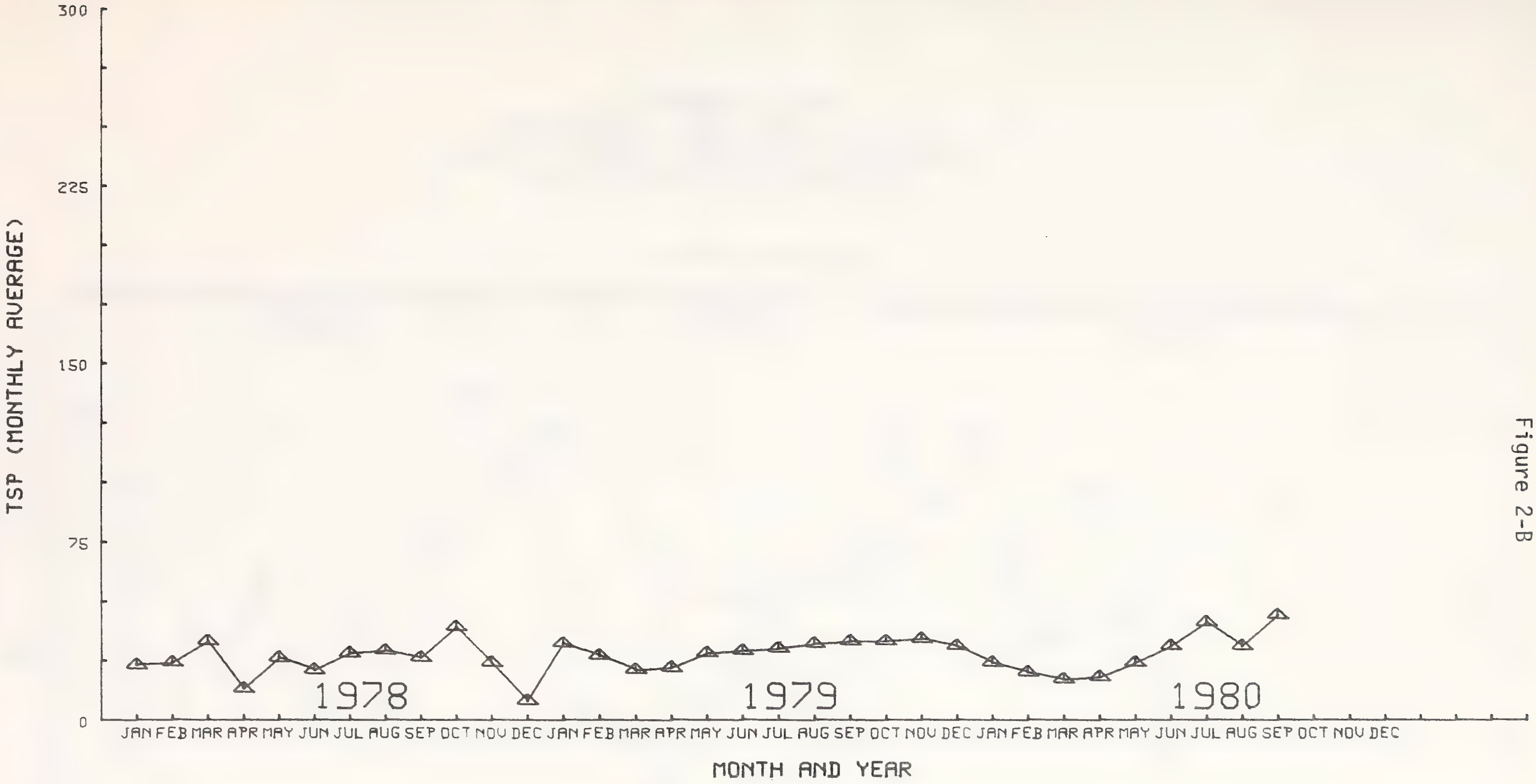
FLATHEAD RIVER BASIN ENVIRONMENTAL IMPACT STUDY

STUDY AREA MAP

MONITORY SITES:

1) MOOSE CITY
2) POLEBRIDGE
3) COL. FALLS-NAAC
4) COL. FALLS-ANDERS
5) KALISPELL-AIRPORT
6) KALISPELL-STROM
7) KALISPELL-UNIV. 4th.
8) KALISPELL-EVERGREEN
9) BIG FORK
10) POLSON
11) RONAN

Figure 2-B

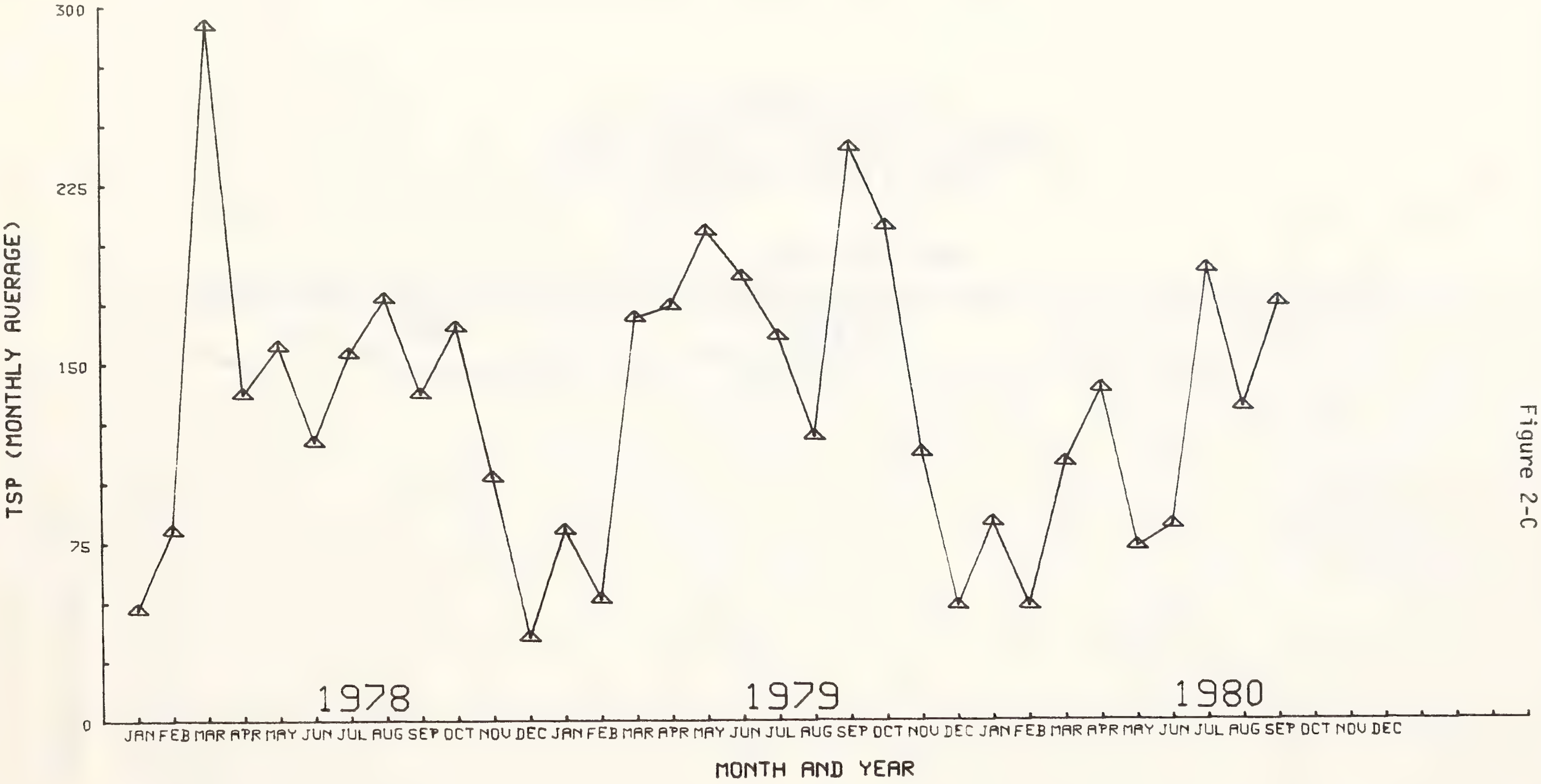


COLUMBIA FALLS-NAAC
HIVOL TRENDS (MONTHLY AVERAGE)
MICROGRAMS PER CUBIC METER
FLATHEAD STUDY

MONTANA AIR QUALITY BUREAU

JAN 13,1981

Figure 2-C



COLUMBIA FALLS-ANDERS
HIVOL TRENDS (MONTHLY AVERAGE)
MICROGRAMS PER CUBIC METER
FLATHEAD STUDY

MONTANA AIR QUALITY BUREAU

JAN 13,1981

Figure 2-D

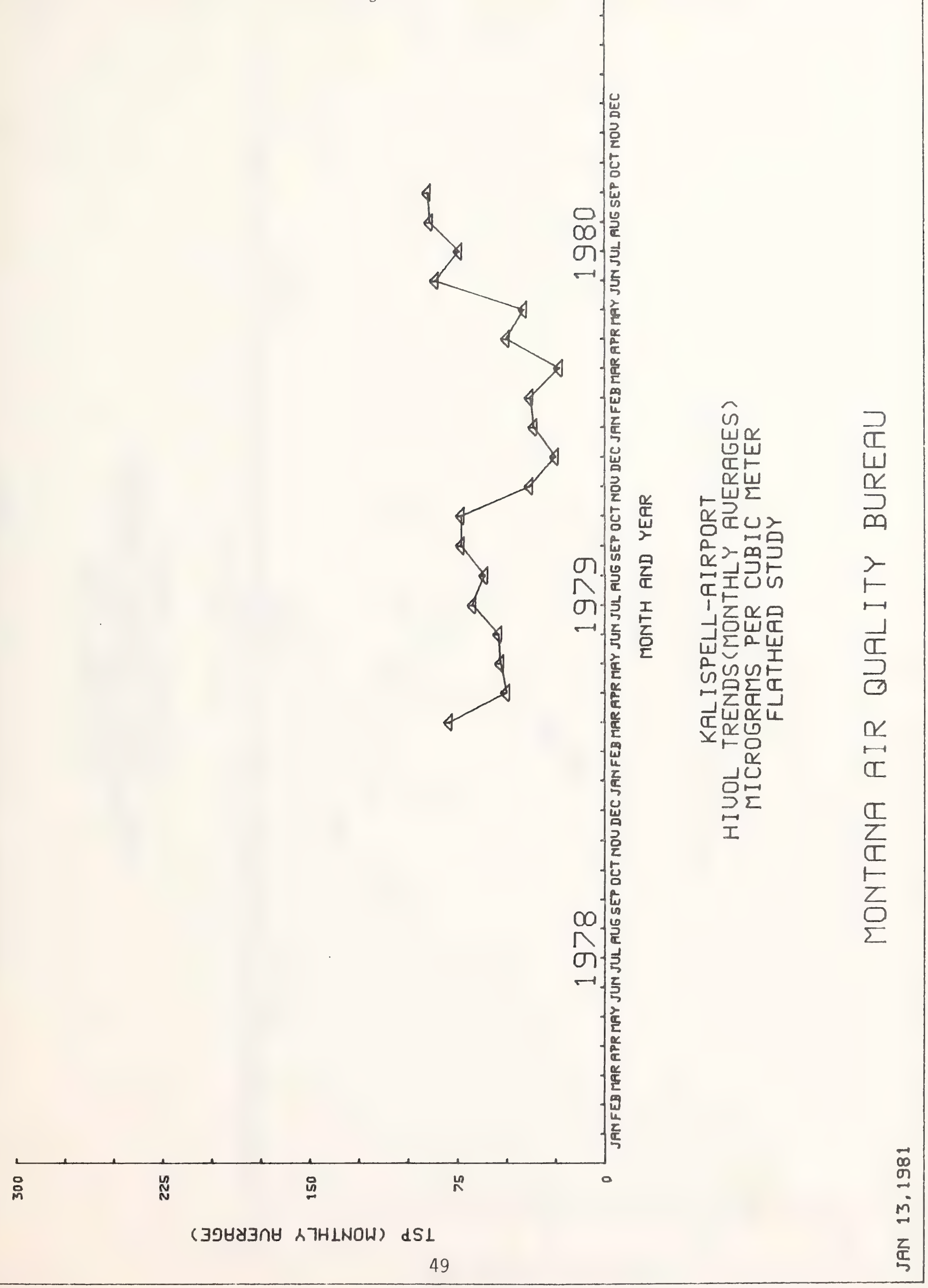
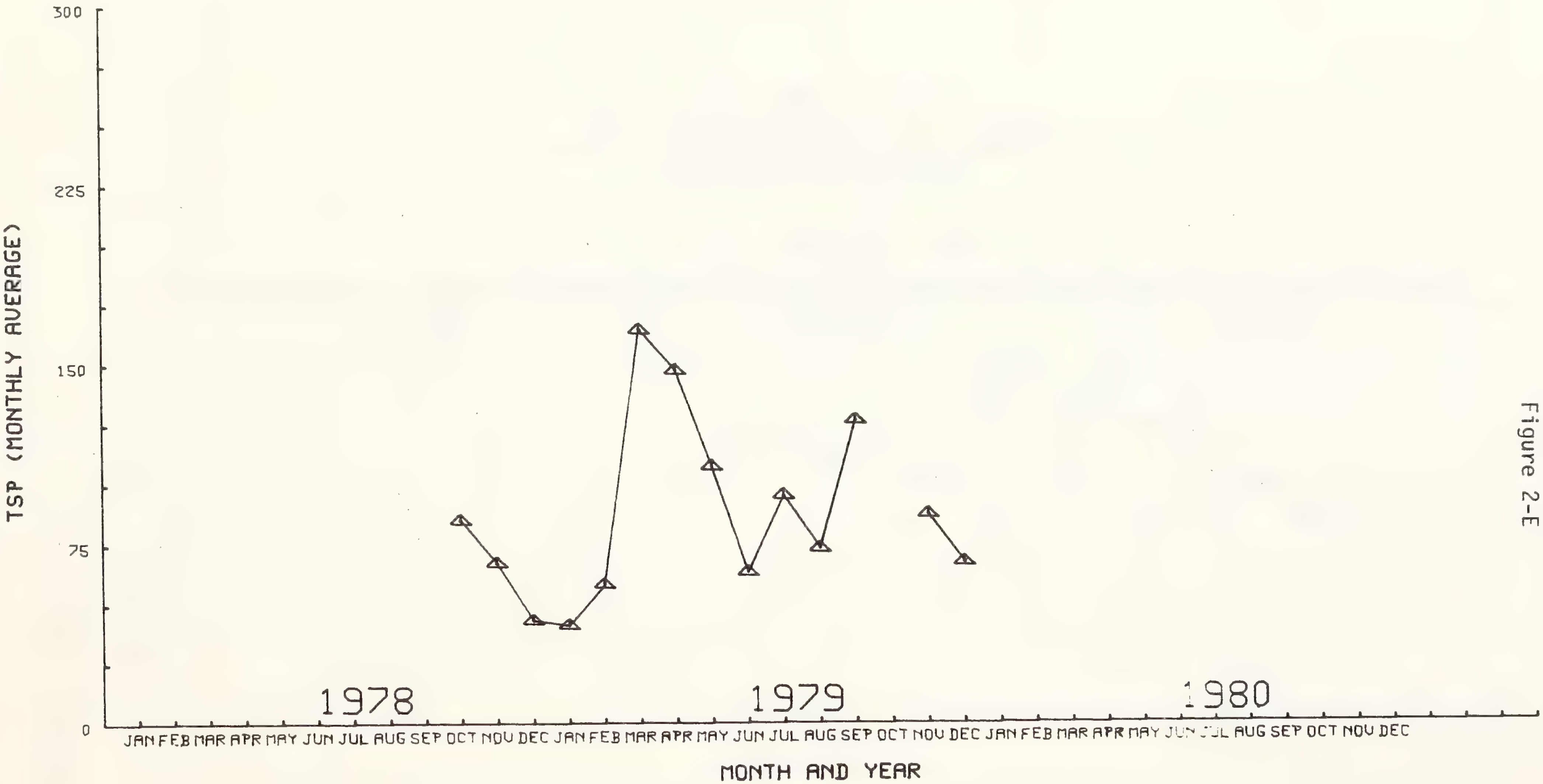

MONTANA AIR QUALITY BUREAU
KALISPELL-AIRPORT
HIVOL TRENDS(MONTHLY AVERAGES)
MICROGRAMS PER CUBIC METER
FLATHEAD STUDY
MONTH AND YEAR
TSP (MONTHLY AVERAGE)
0
75
150
225
300
1978
1979
1980
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
JAN 13, 1981

Figure 2-E



KALISPELL-STROM
HIVOL TRENDS (MONTHLY AVERAGE)
MICROGRAMS PER CUBIC METER
FLATHEAD STUDY

MONTANA AIR QUALITY BUREAU

JAN 13,1981

Figure 2-F

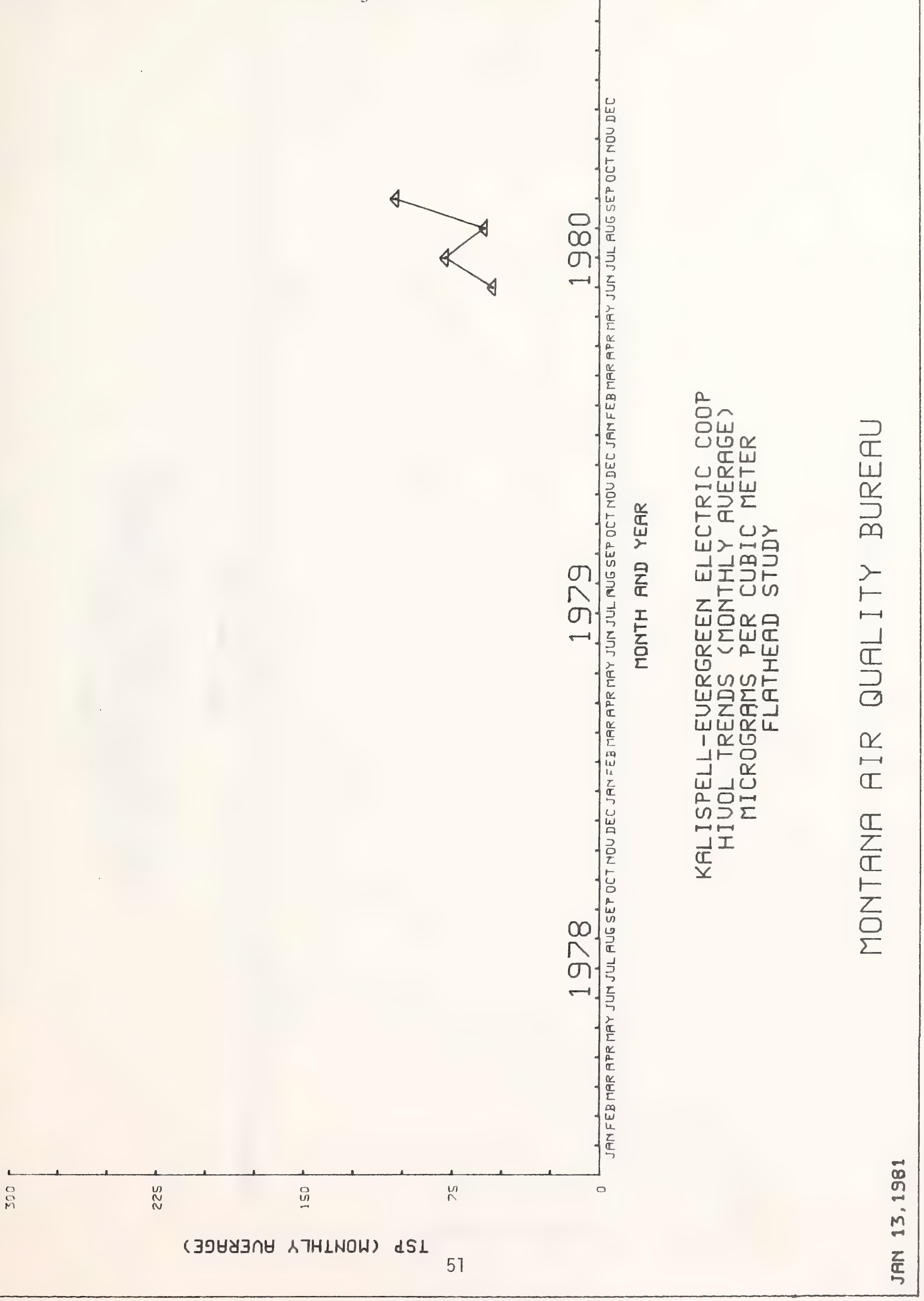
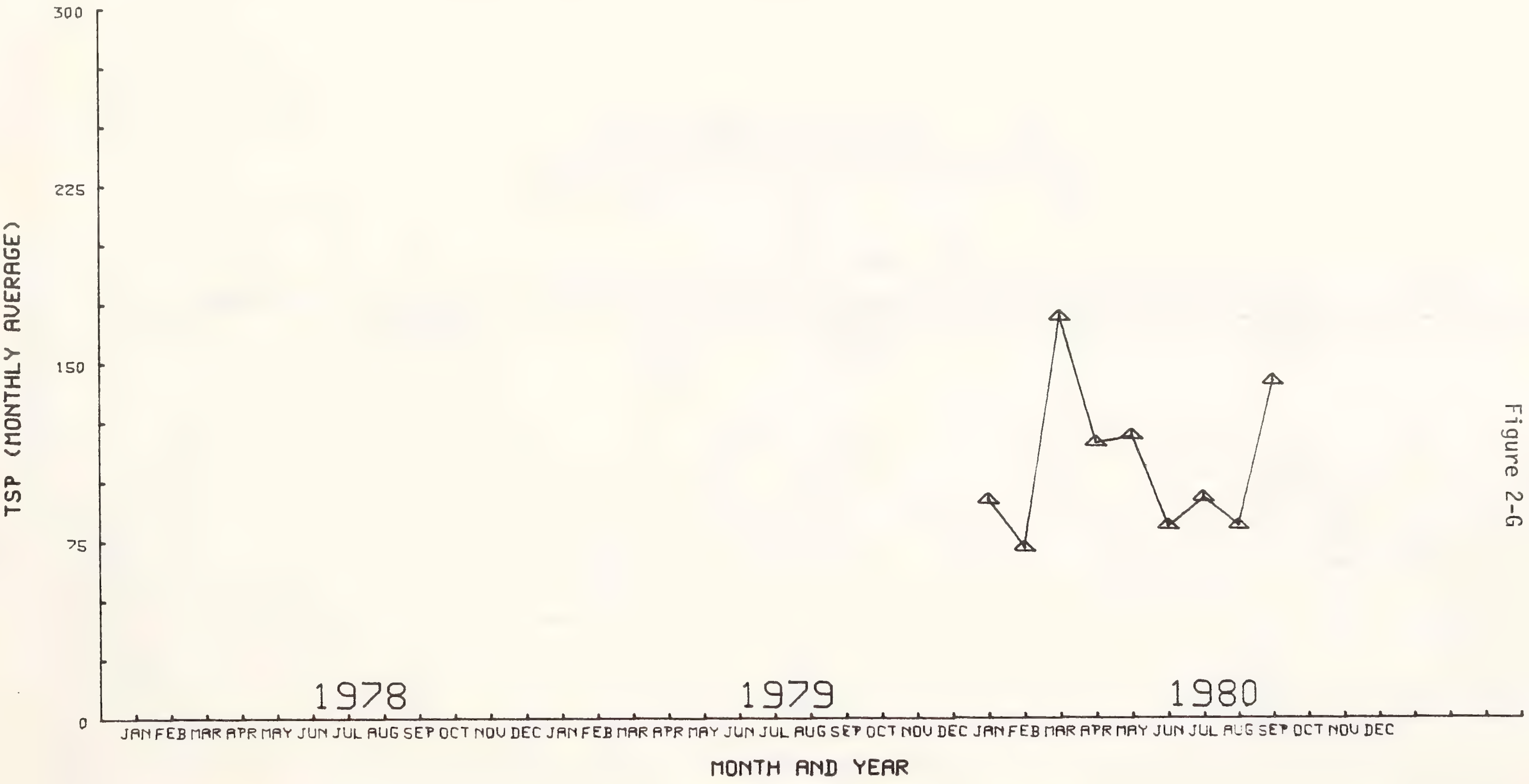

TSP (MONTHLY AVERAGE)
300
225
150
75
0
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
1978
1979
1980
MONTH AND YEAR
KALISPELL-EVERGREEN ELECTRIC COOP
HIVOL TRENDS (MONTHLY AVERAGE)
MICROGRAMS PER CUBIC METER
FLATHEAD STUDY
MONTANA AIR QUALITY BUREAU
JAN 13,1981

Figure 2-G



KALISPELL-UNIVERSAL ATHLETICS
HIVOL TRENDS (MONTHLY AVERAGE)
MICROGRAMS PER CUBIC METER
FLATHEAD STUDY

MONTANA AIR QUALITY BUREAU

AN 13,1981

Figure 2-H

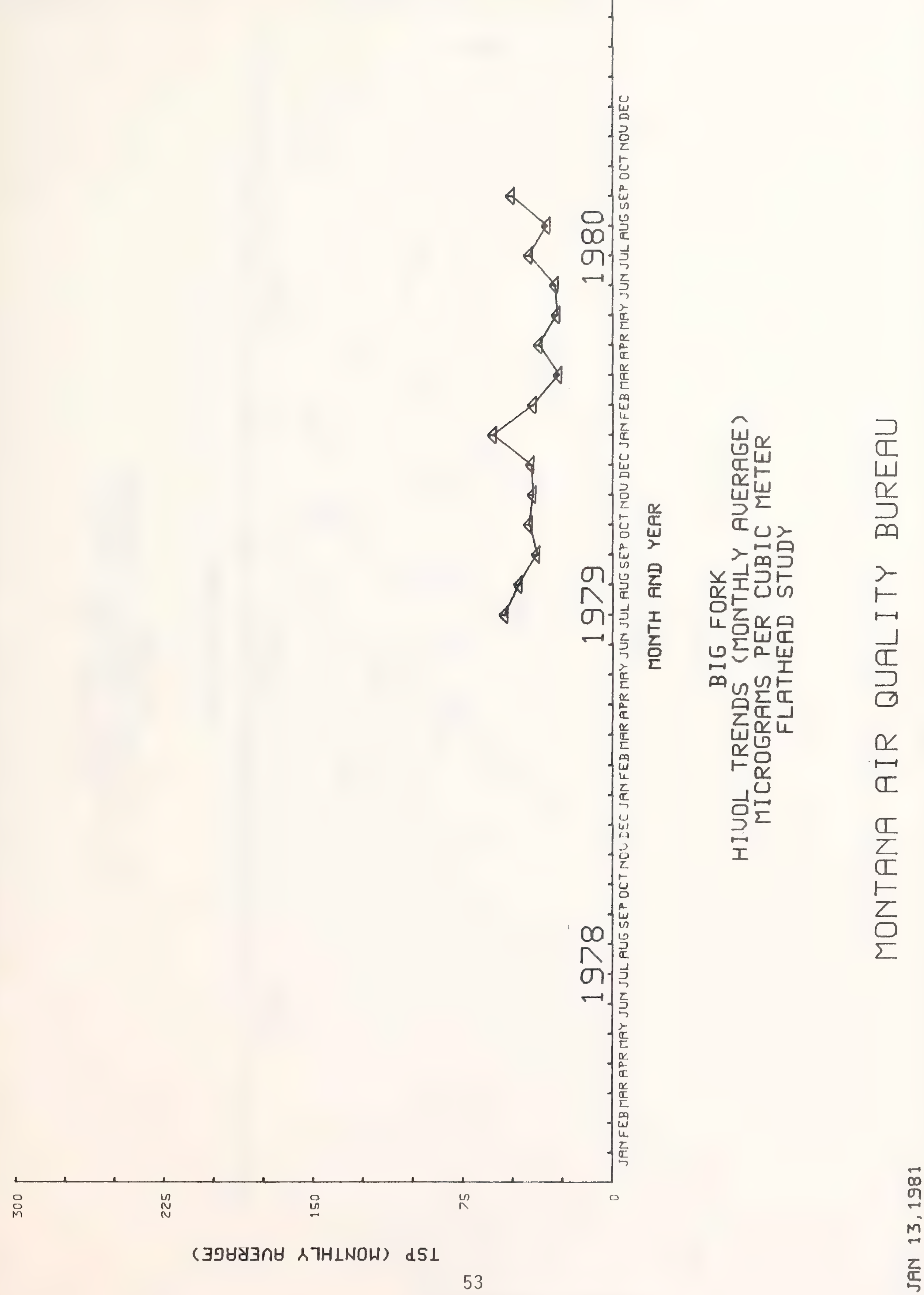
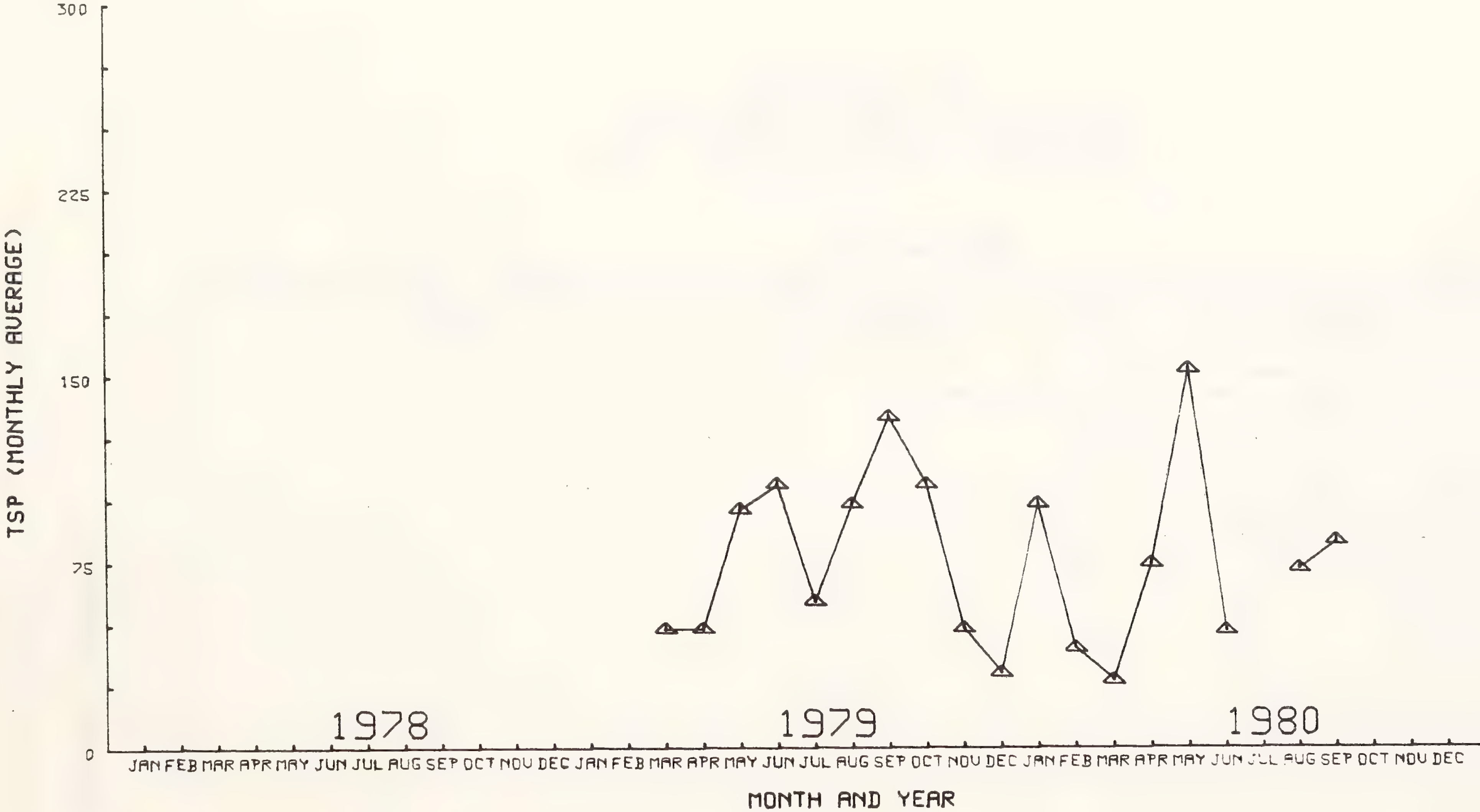

TSP (MONTHLY AVERAGE)
0
75
150
225
300
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
1978
1979
1980
MONTH AND YEAR
BIG FORK
HIVOL TRENDS (MONTHLY AVERAGE)
MICROGRAMS PER CUBIC METER
FLATHEAD STUDY
MONTANA AIR QUALITY BUREAU
JAN 13,1981

Figure 2-I

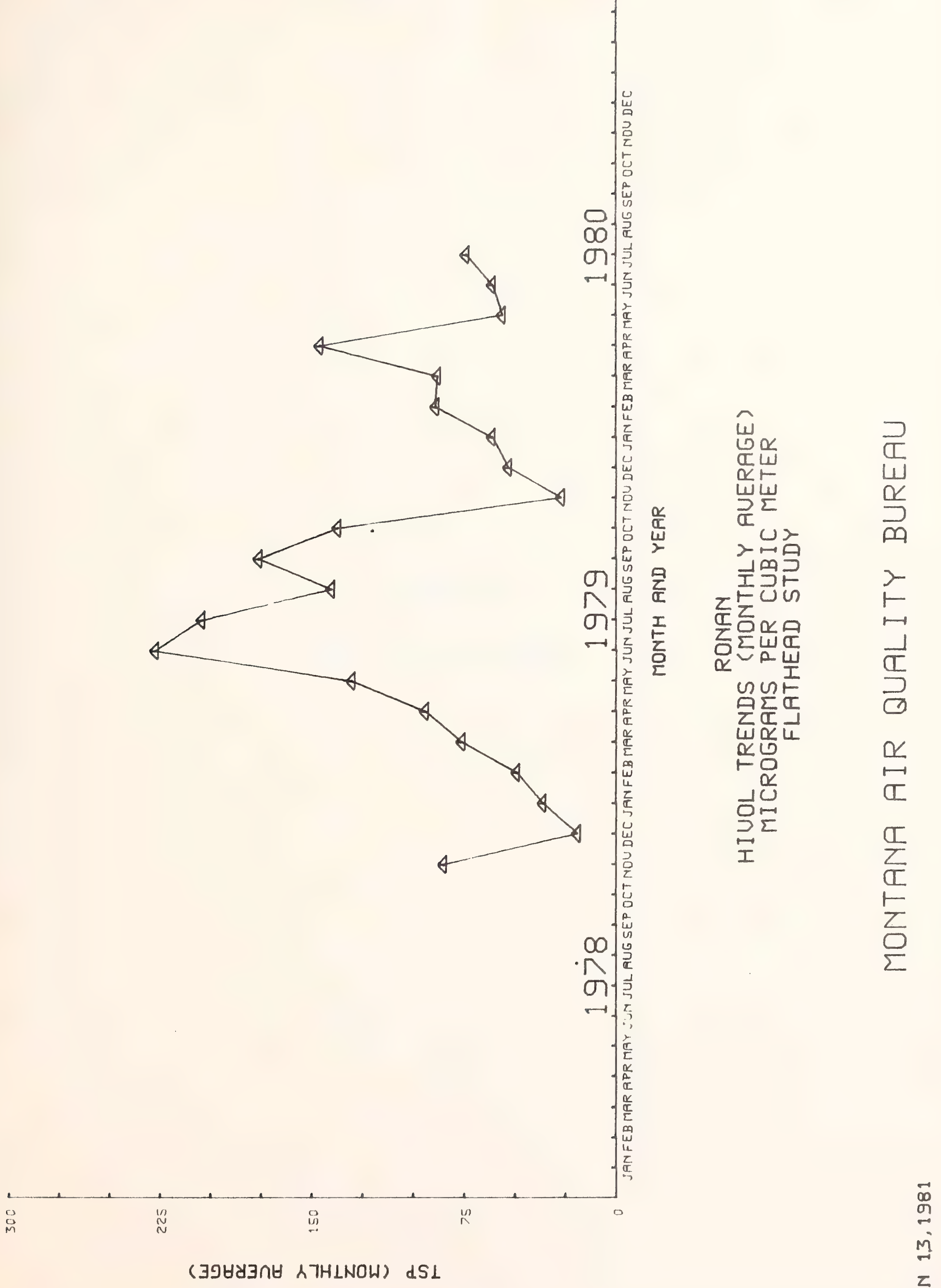


POLSON
HIVOL TRENDS (MONTHLY AVERAGE)
MICROGRAMS PER CUBIC METER
FLATHEAD STUDY

MONTANA AIR QUALITY BUREAU

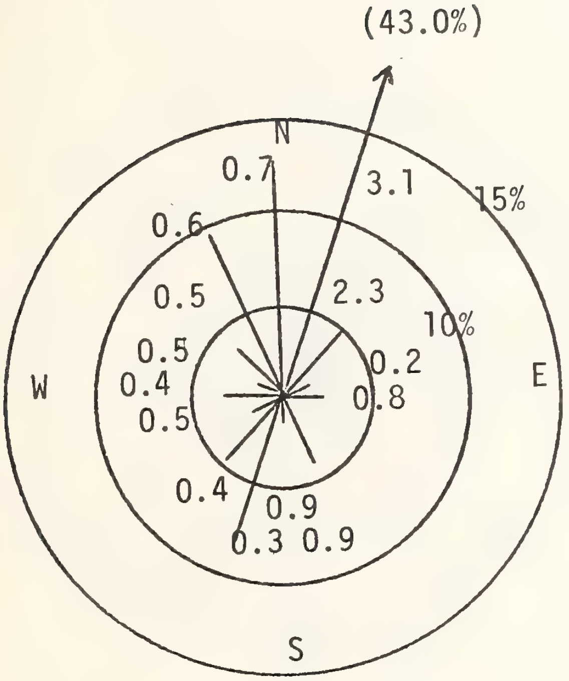
AN 13,1981

Figure 2-J

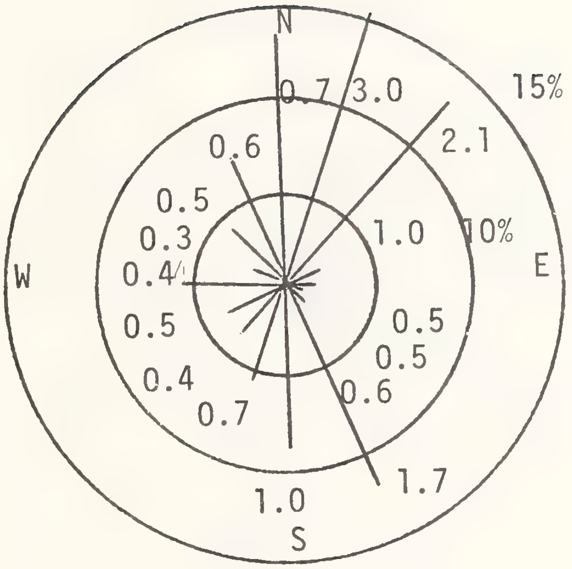

MONTANA AIR QUALITY BUREAU
RONAN
HIVOL TRENDS (MONTHLY AVERAGE)
MICROGRAMS PER CUBIC METER
FLATHEAD STUDY
MONTH AND YEAR
TSP (MONTHLY AVERAGE)
0
75
150
225
300
1978
1979
1980
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
JAN 13,1981

APPENDIX A

SURFACE WIND ROSES

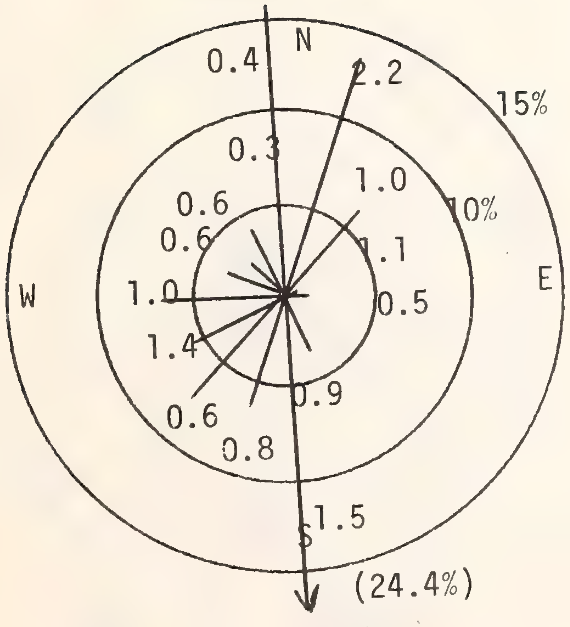


January 1978
Calm 3.9%
(Total Hours 102)

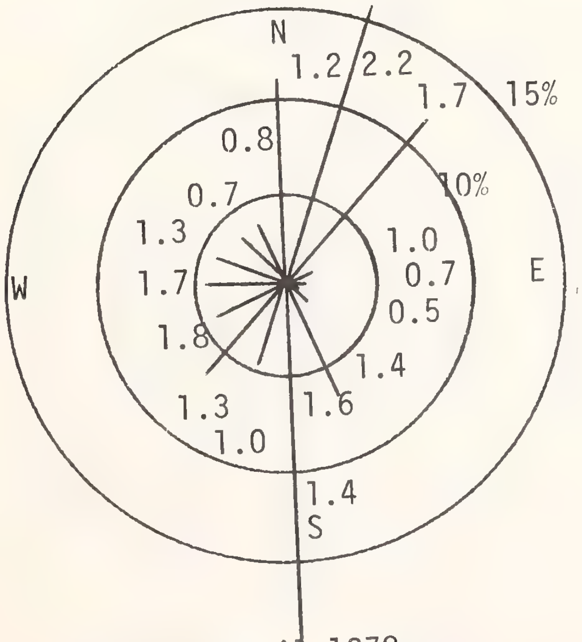


February 1978
Calm 2.6%
(Total Hours 232)

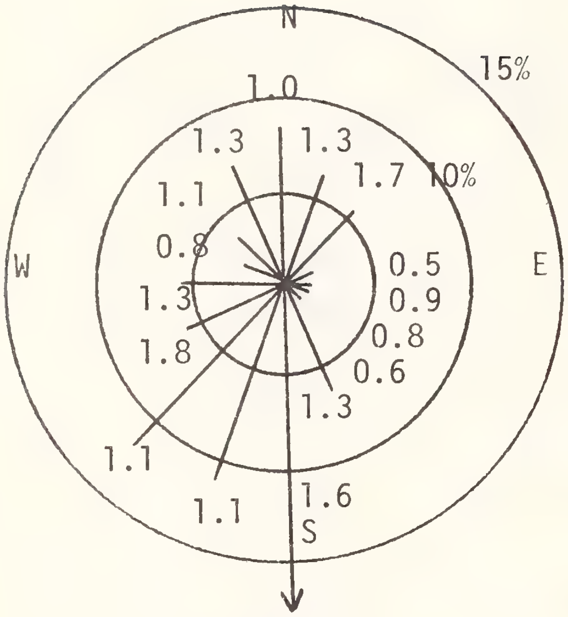
Monthly Wind Roses
Kalispell - Airport Site
Kalispell, Montana



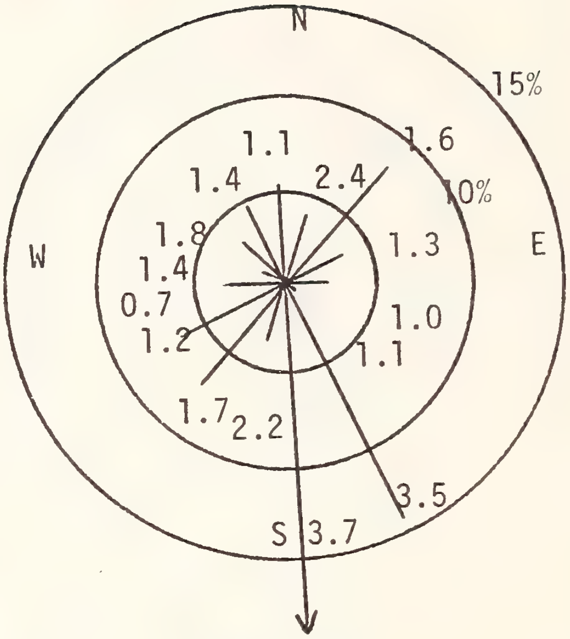
March 1978
Calm 3.7%
(Total Hours 323)



April 1978
Calm 0.9%
(Total Hours 688)

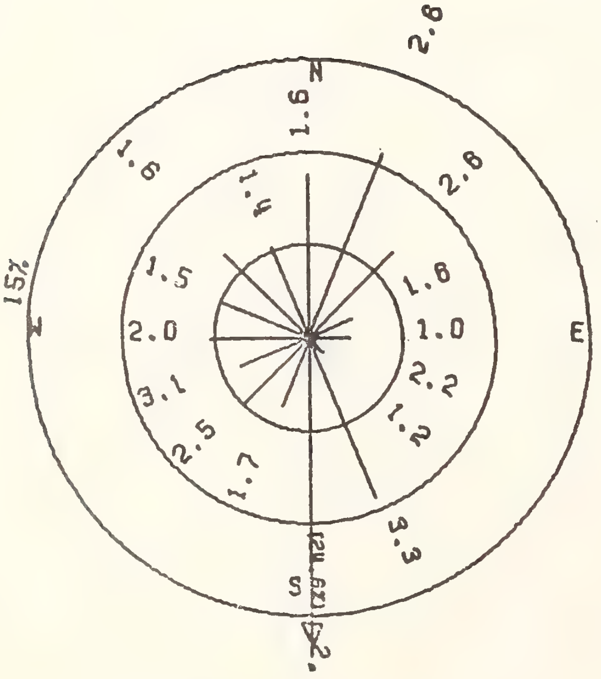


May 1978
Calm 0.9%
(Total Hours 682)

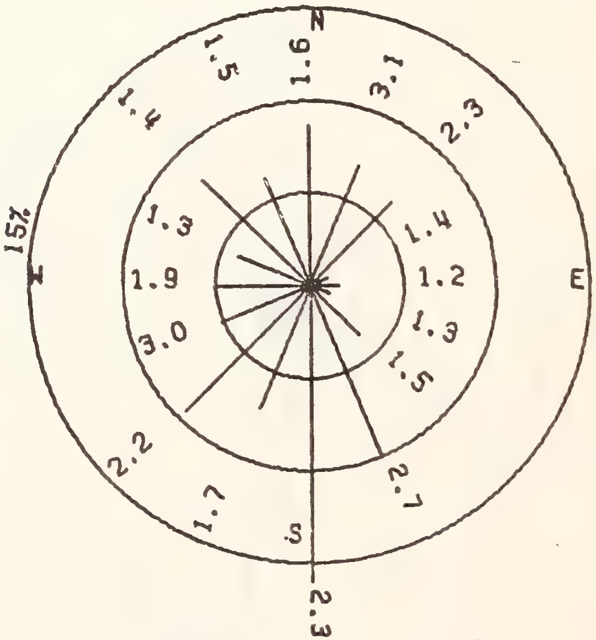


June 1978
Calm 0.0%
(Total Hours 166)

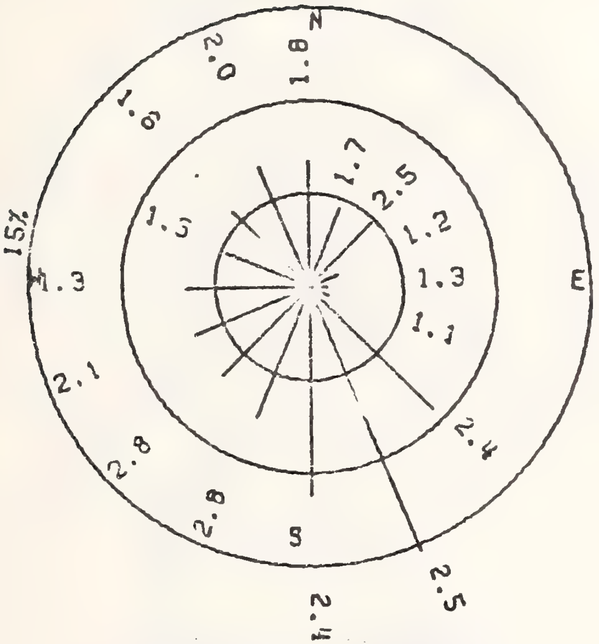
Monthly Wind Roses
Kalispell - Airport Site
Kalispell, Montana



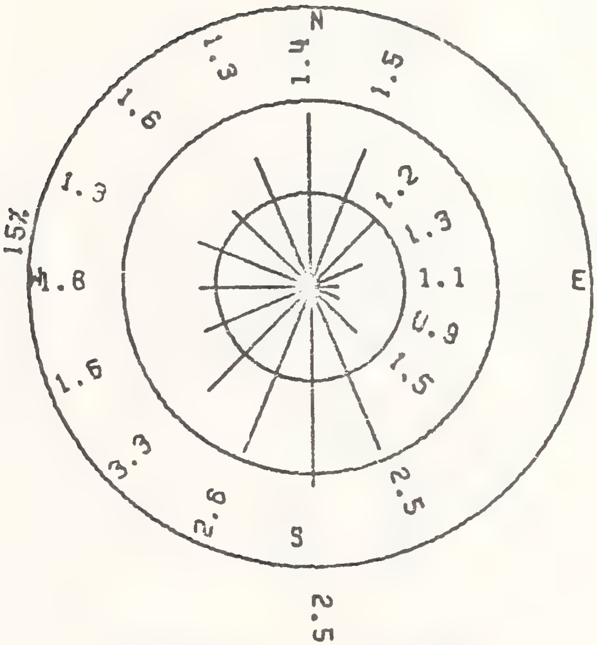
JULY 1978
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 690)



AUGUST 1978
HOURS 0 TO 23
CALM 0.1%
(TOTAL HOURS 722)

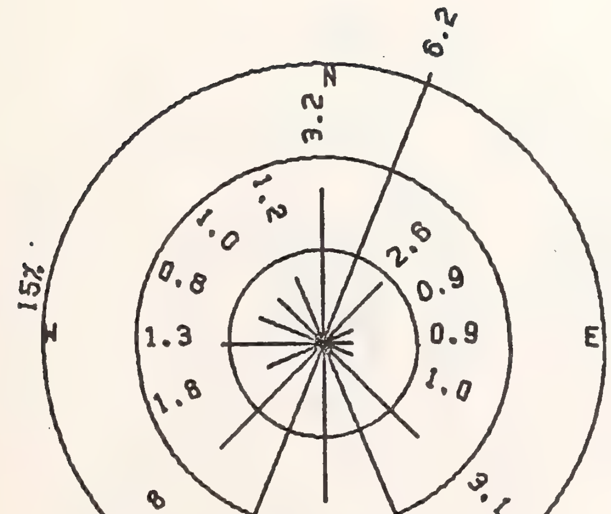


SEPTEMBER 1978
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 717)

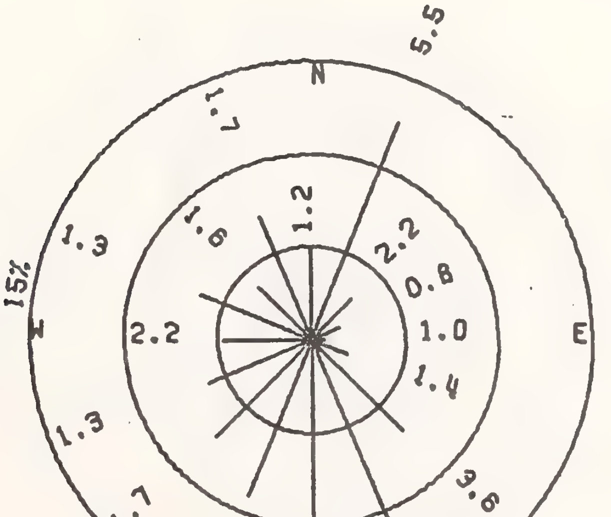


OCTOBER 1978
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 738)

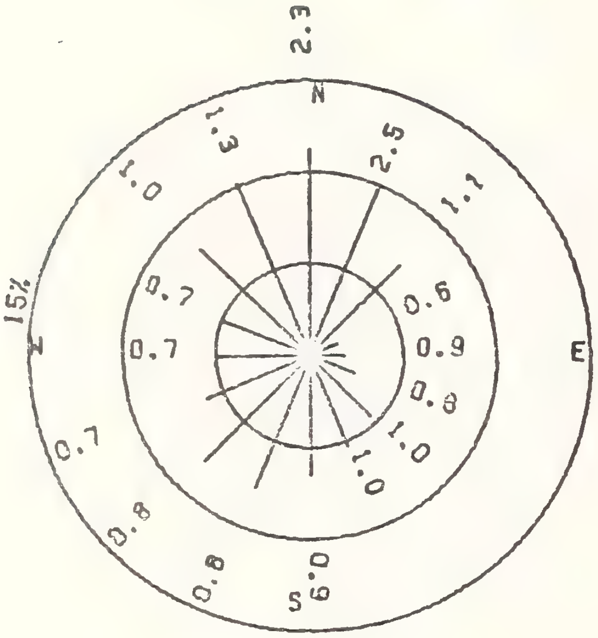
Monthly Wind Roses
Kalispell - Airport Site
Kalispell, Montana



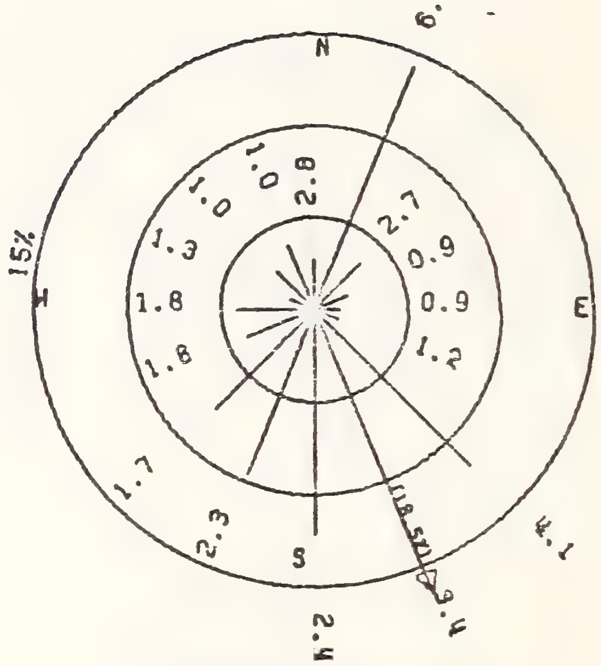
NOVEMBER 1978
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 720)



DECEMBER 1978
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 744)

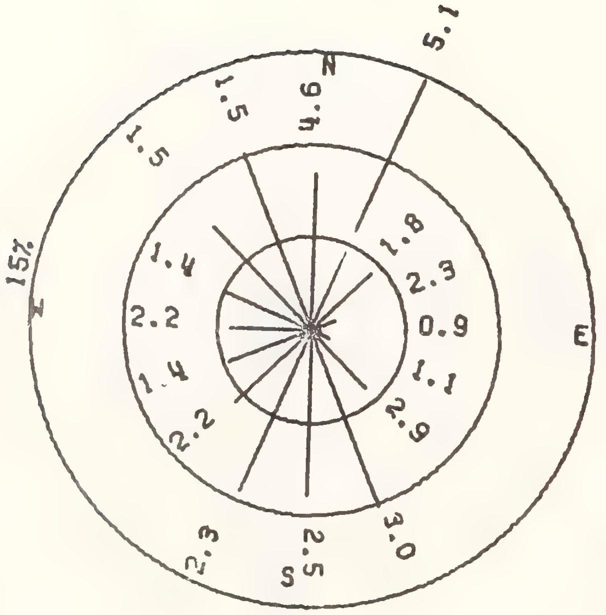


JANUARY 1979
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 744)

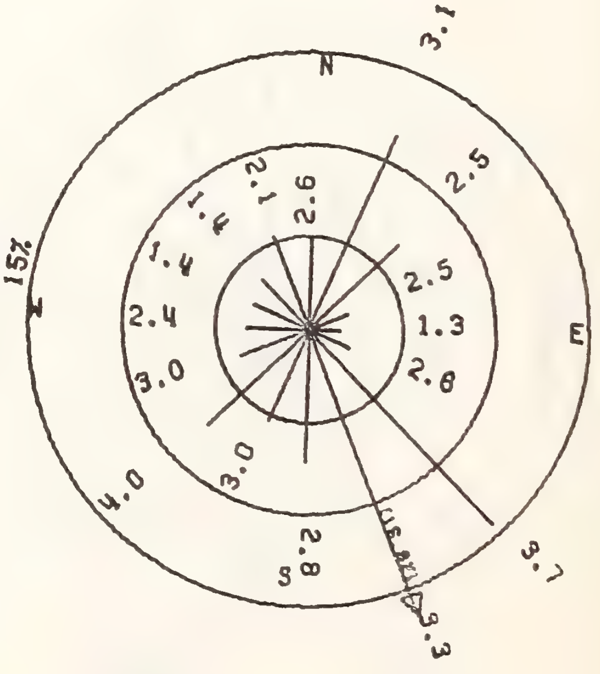


FEBRUARY 1979
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 672)

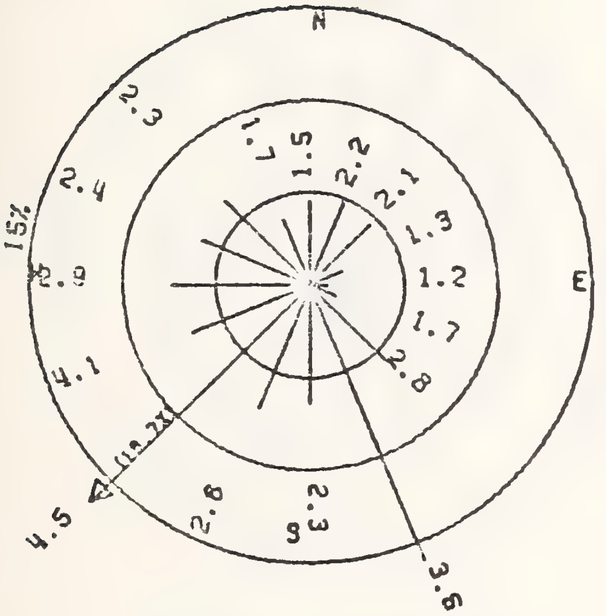
Monthly Wind Roses
Kalispell - Airport Site
Kalispell, Montana



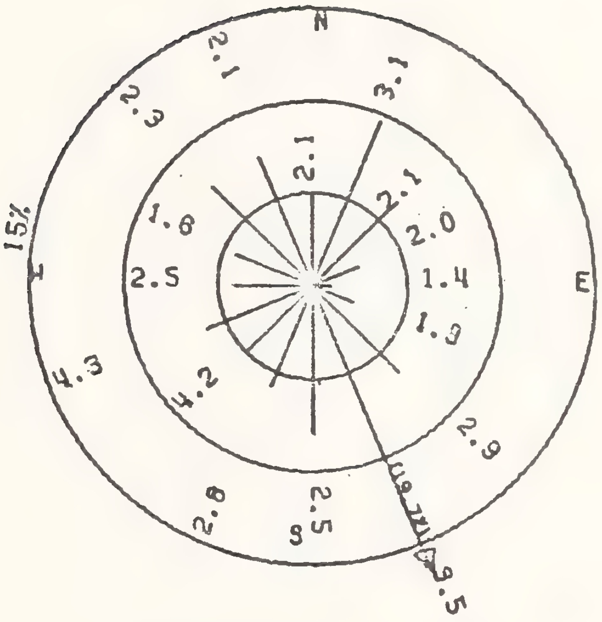
MARCH 1979
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 744)



APRIL 1979
HOURS 0 TO 23
CALM 0.8%
(TOTAL HOURS 714)

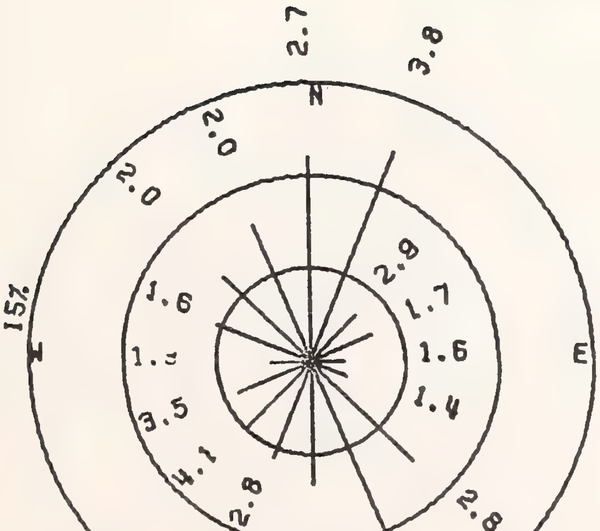


MAY 1979
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 534)

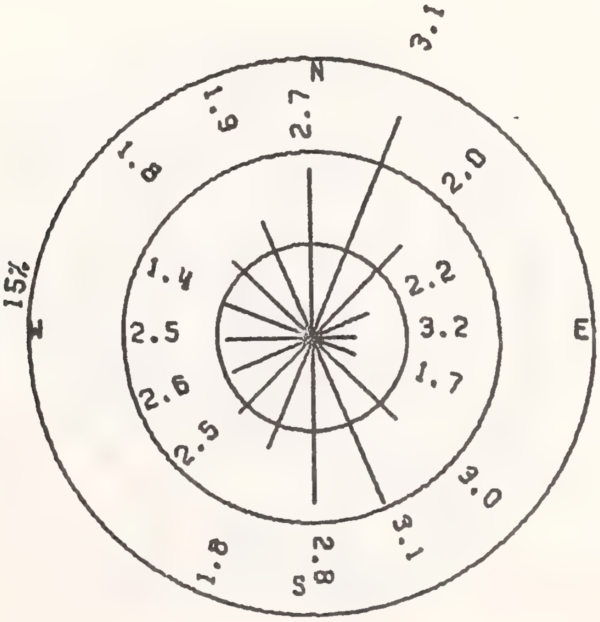


JUNE 1979
HOURS 0 TO 23
CALM 0.1%
(TOTAL HOURS 711)

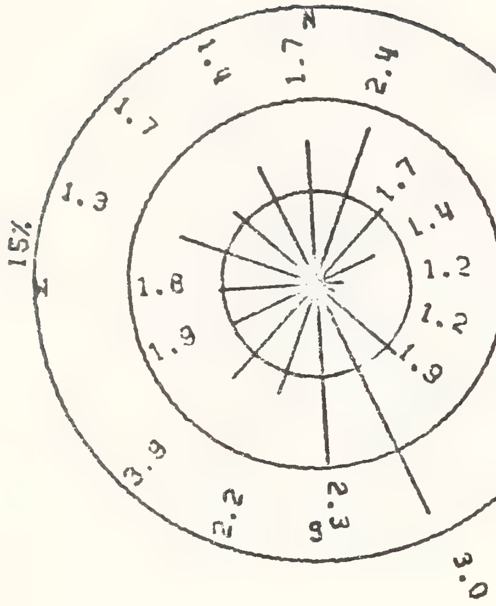
Monthly Wind Roses
Kalispell - Airport Site
Kalispell, Montana



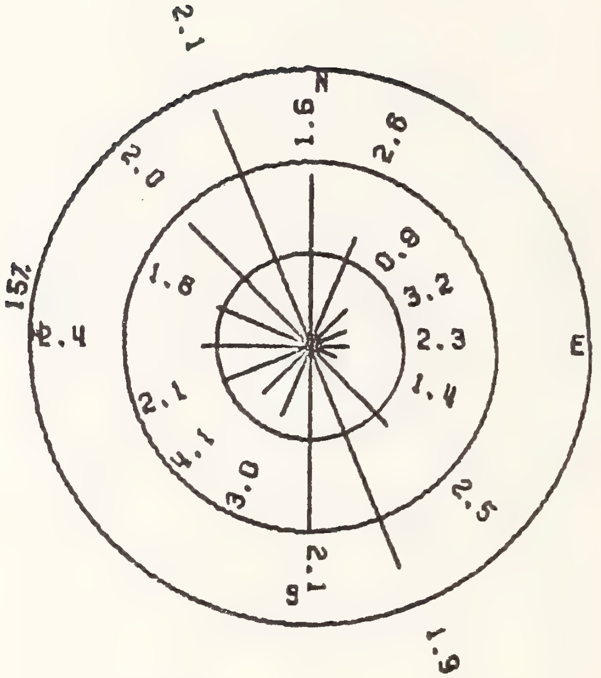
JULY 1979
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 744)



AUGUST 1979
HOURS 0 TO 23
CALM 0.4%
(TOTAL HOURS 741)

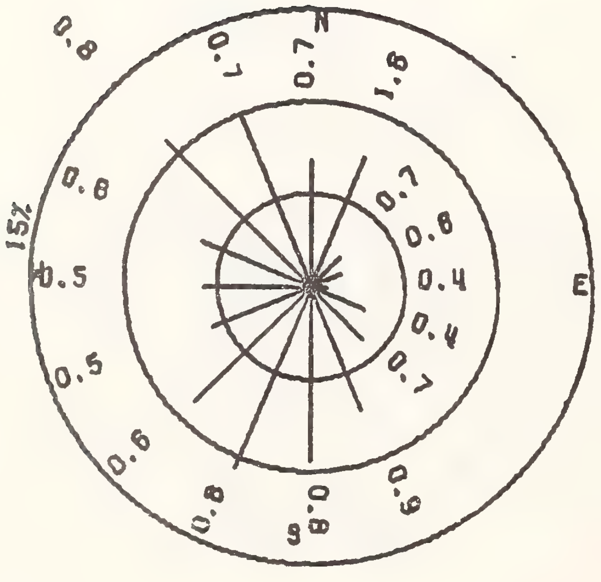


September 1979
Hours 0 to 23
Calm 0.0%
(Total Hours 687)

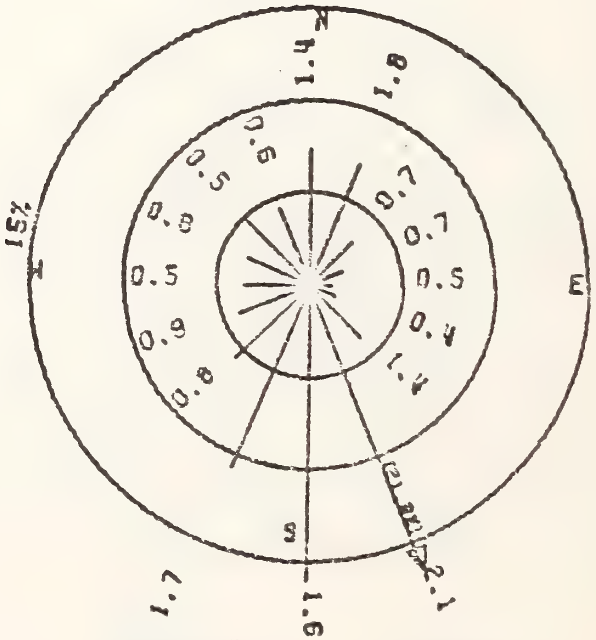


OCTOBER 1979
HOURS 0 TO 23
CALM 1.4%
(TOTAL HOURS 721)

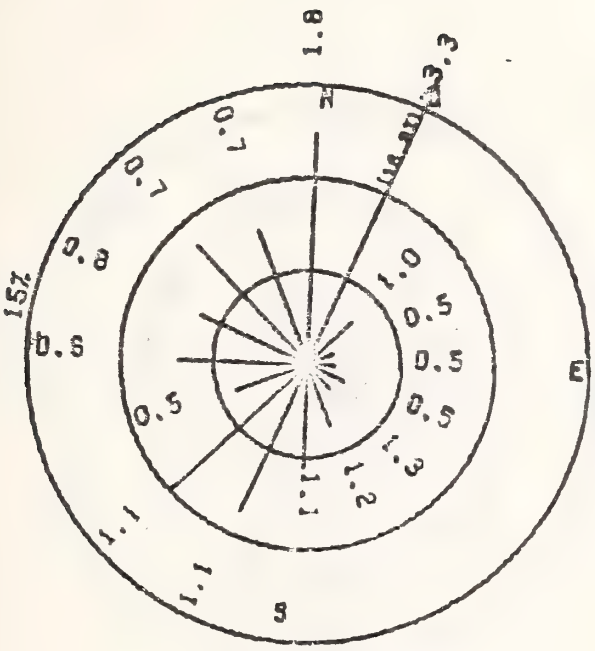
Monthly Wind Roses
Kalispell - Airport Site
Kalispell, Montana



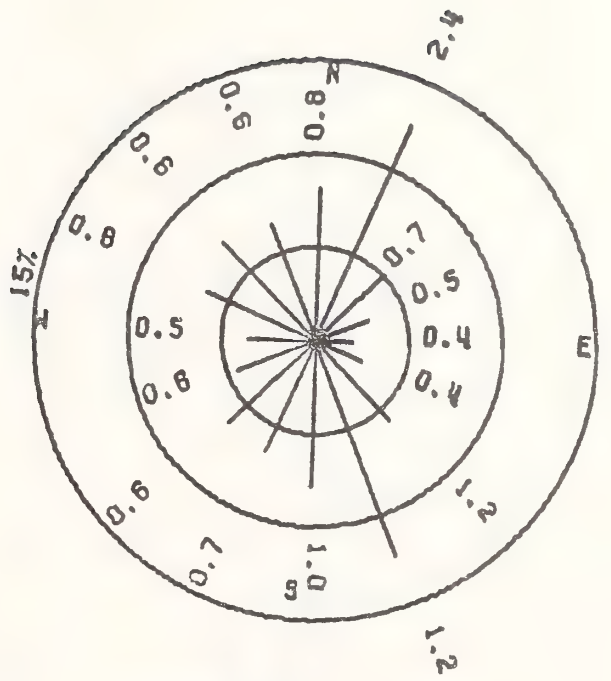
NOVEMBER 1979
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 686)



DECEMBER 1979
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 742)

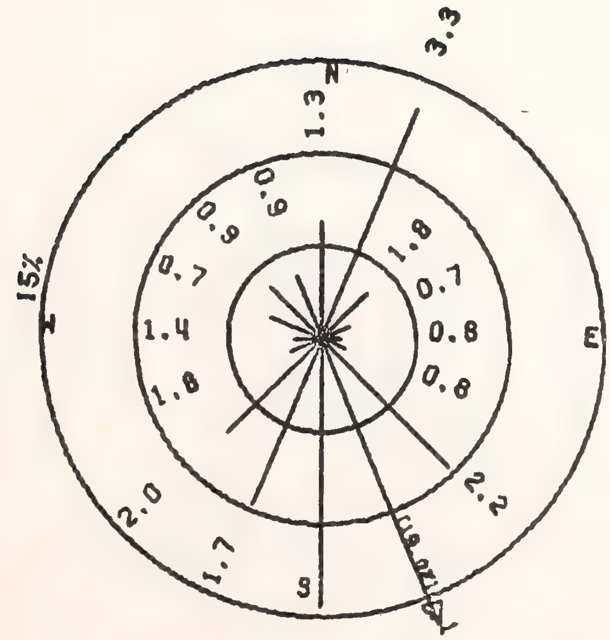


JANUARY 1980
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 742)

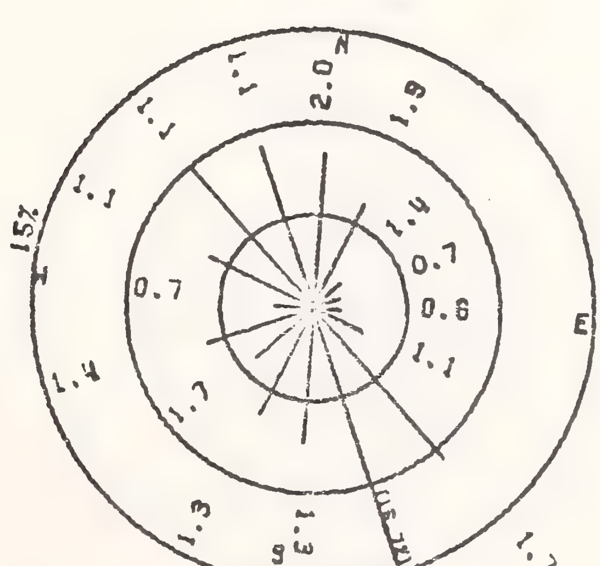


FEBRUARY 1980
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 696)

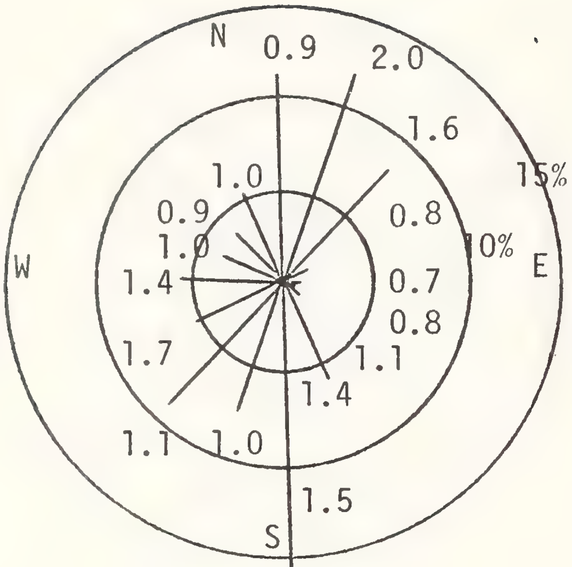
Monthly Wind Roses
Kalispell - Airport Site
Kalispell, Montana



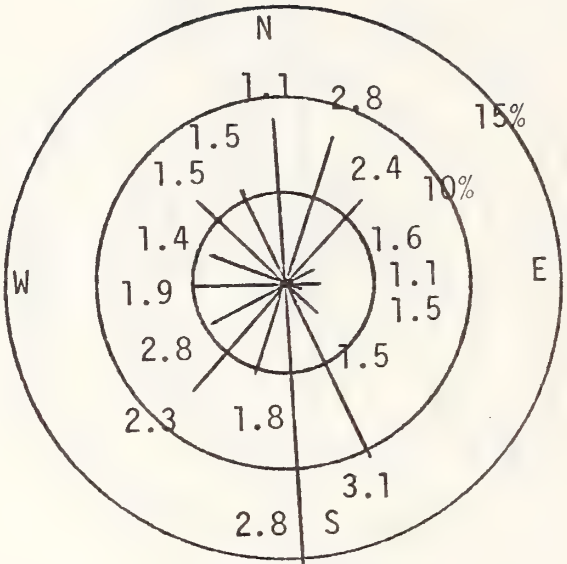
MARCH 1980
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 678)



APRIL 1980
HOURS 0 TO 23
CALM 0.0%
(TOTAL HOURS 473)

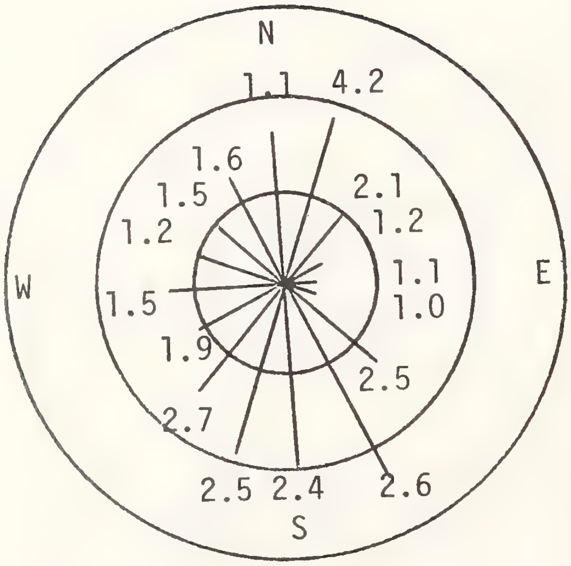


Spring 1978
Calm 1.4%
(Total Hours 1693)

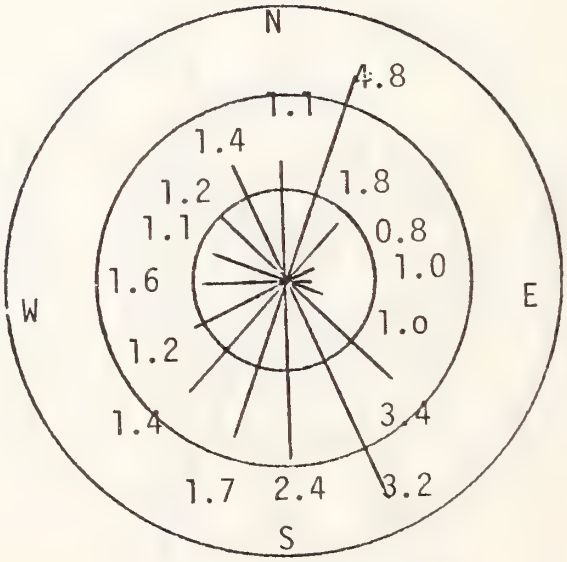


Summer 1978
Calm 0.0%
(Total Hours 1556)

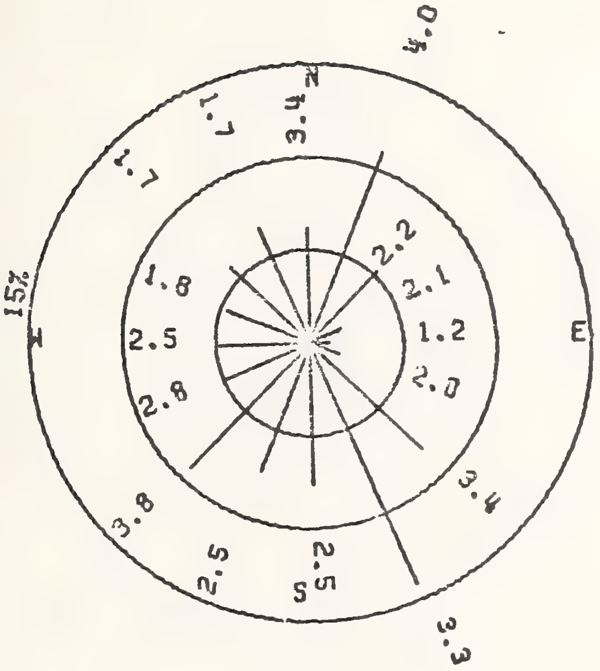
Seasonal Wind Roses
Kalispell - Airport Site
Kalispell, Montana



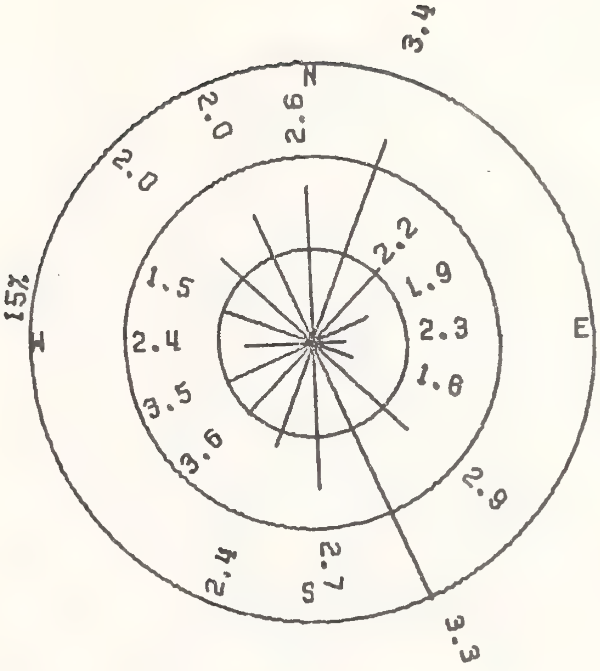
Autumn 1978
Calm 0.0%
(Total Hours 2139)



Winter 1978-79
Calm 0.0%
(Total Hours 2124)

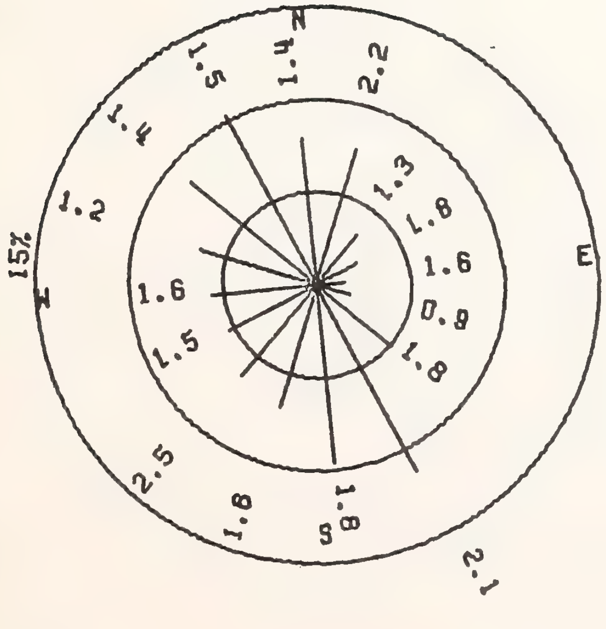


Calm 0.2%
(Total Hours 2196)
Spring1979

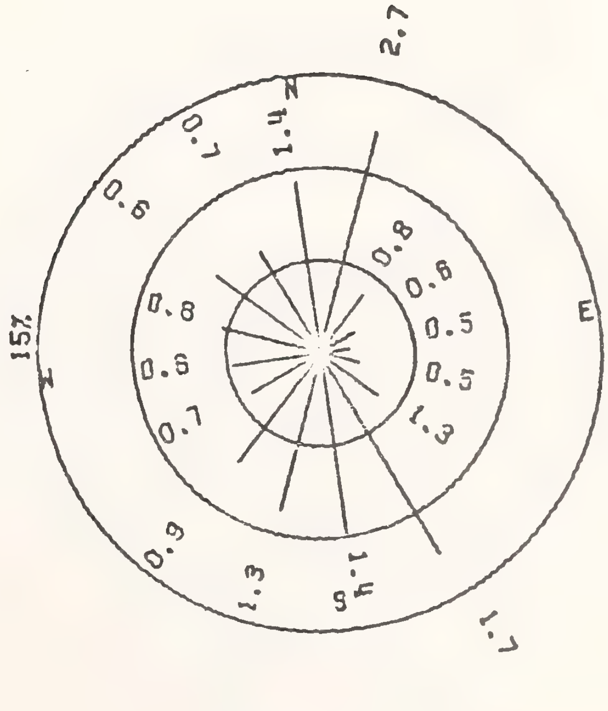


Calm 0.5%
(Total Hours 2196)
Summer 1979

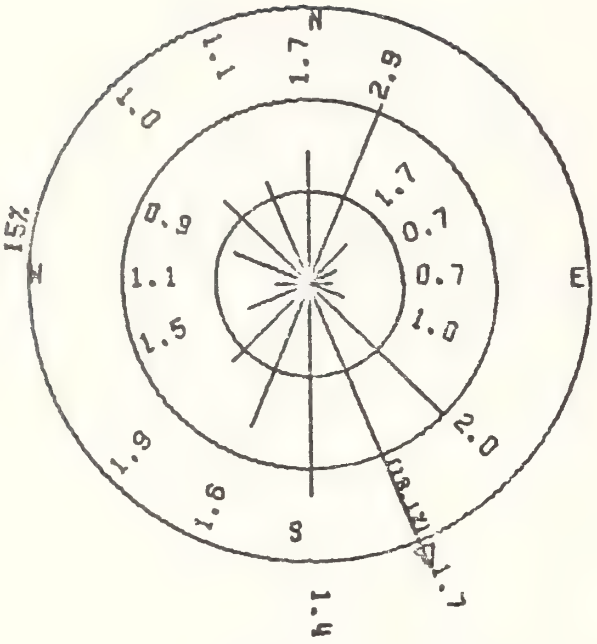
Seasonal Wind Roses
Kalispell Airport Site
Kalispell, Montana



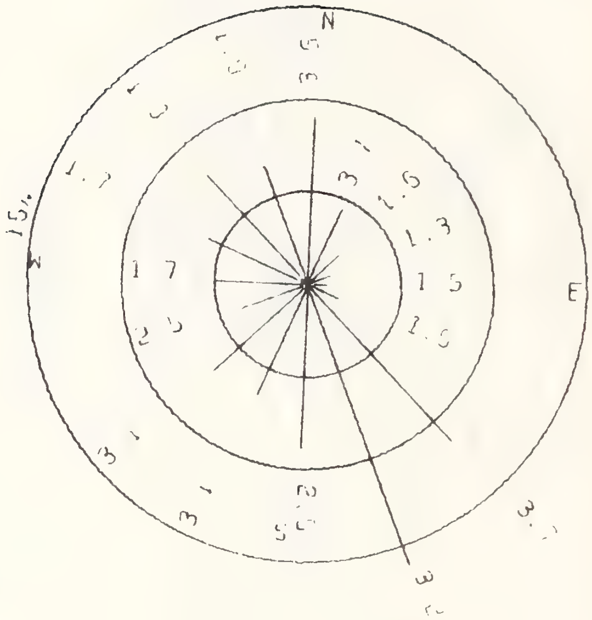
Calm 0.5%
(Total Hours 2100)
Autumn 1979



Calm 0.5%
(Total Hours 2180)
Winter 1979-1980

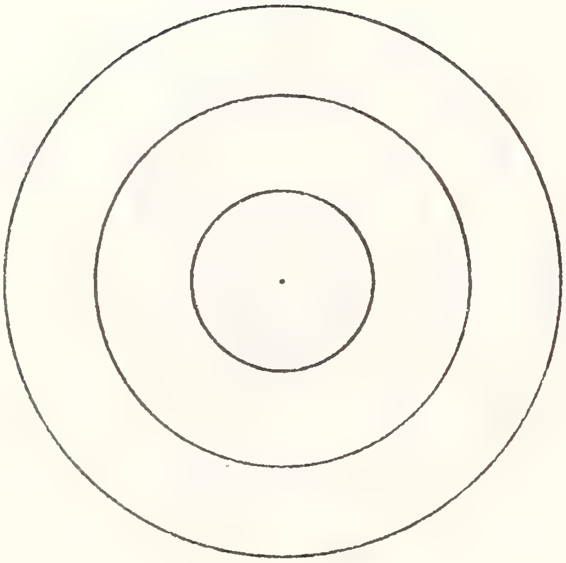


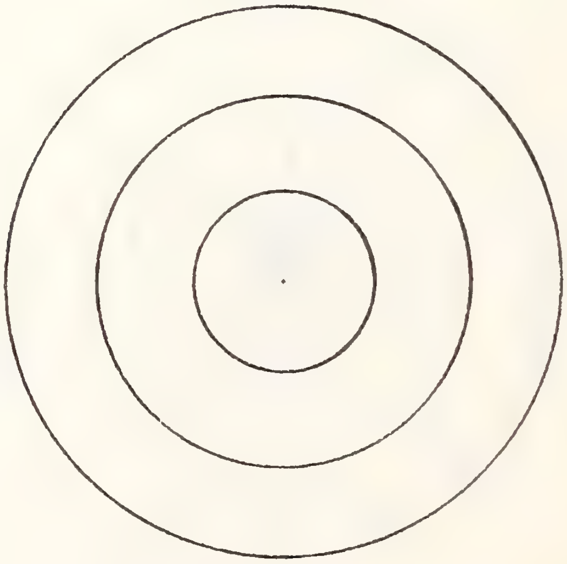
Calm 0.0%
(Total Hours 1151)
Spring 1980

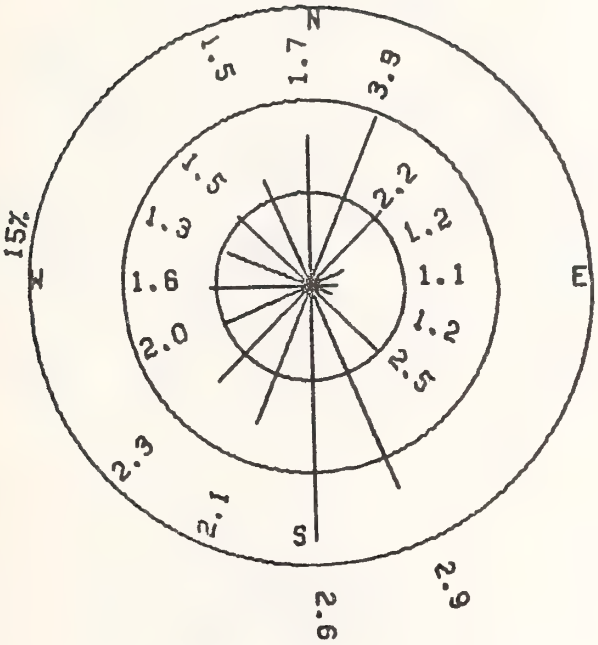


Calm 0.7%
(Total Hours 2192)
Summer 1980

Seasonal Wind Roses
Kalispell Airport Site
Kalispell, Montana

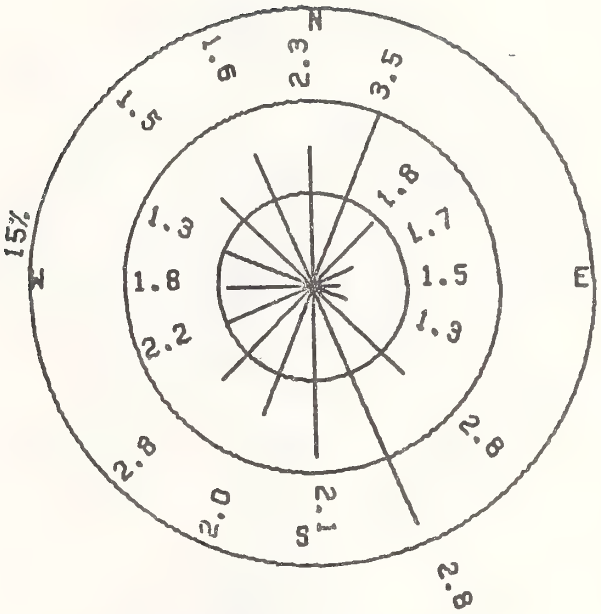




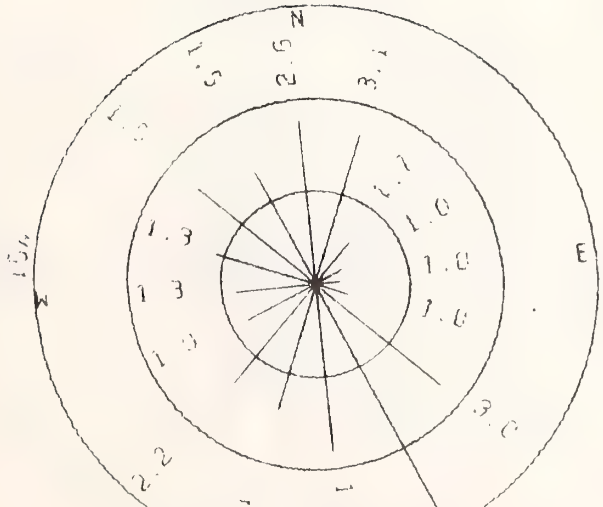


Calm 1.3%
(Total Hours 4752)
1978

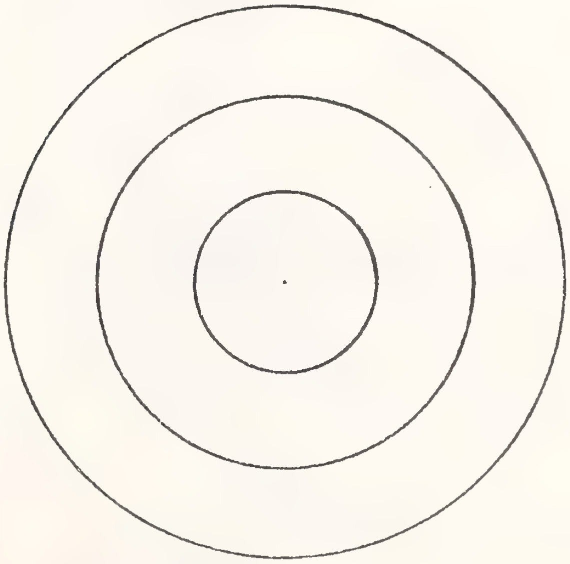
Annual Wind Roses
Kalispell - Airport Site
Kalispell, Montana

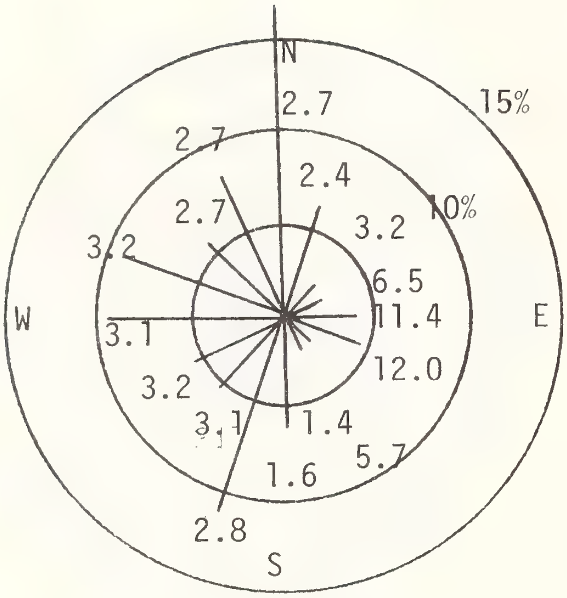


Calm 0.2%
(Total Hours 8446)
1979

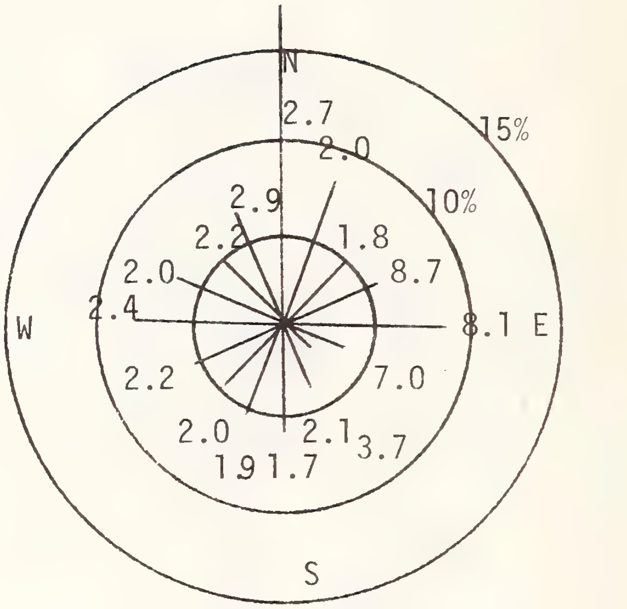


Calm 0.5%
(Total Hours 5844)
1980



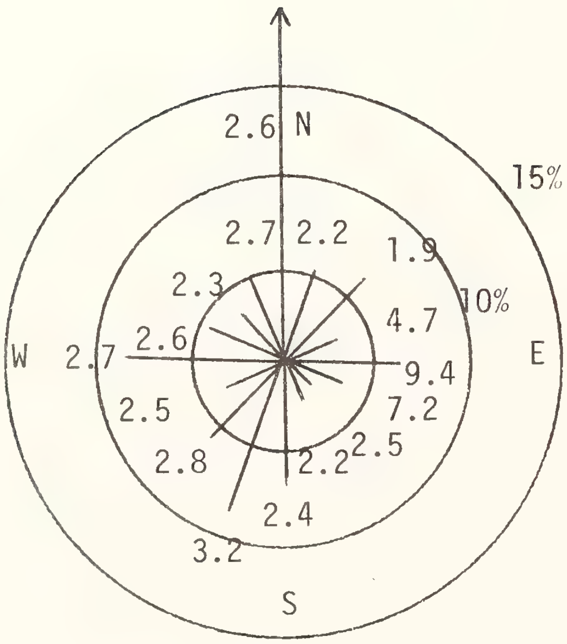


January 1978
Calm 0.0%
(total hours 729)

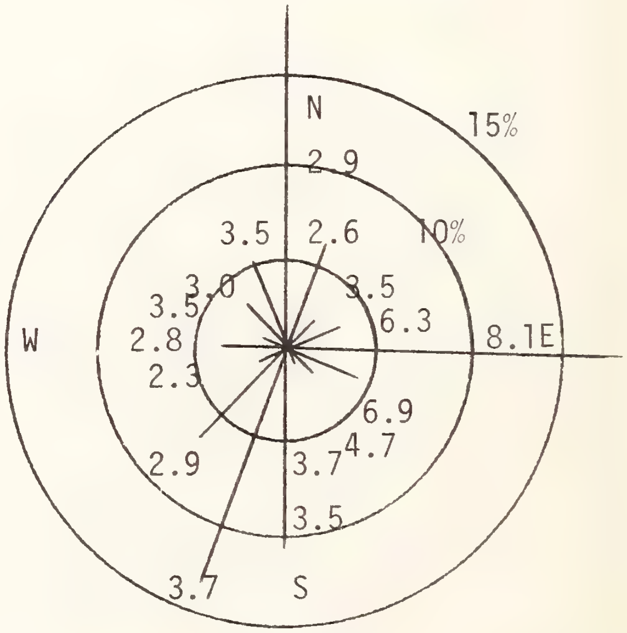


February 1978
Calm 0.0%
(total hours 402)

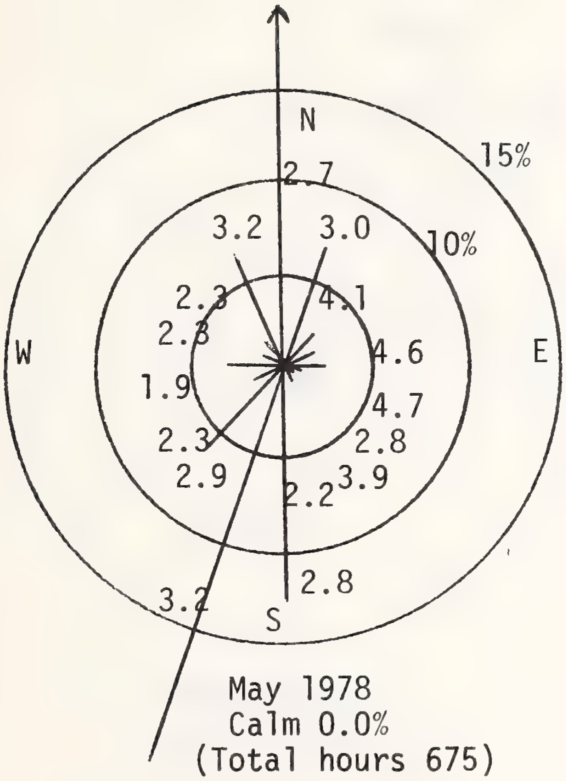
Monthly Wind Roses
Teakettle Mountain Site
Columbia Falls, Montana



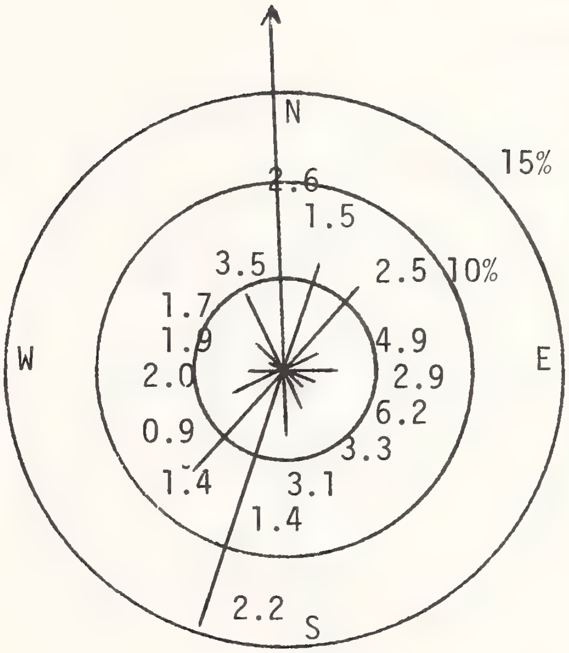
March 1978
Calm 0.0%
(total hours 716)



April 1978
Calm 0.0%
(total hours 693)

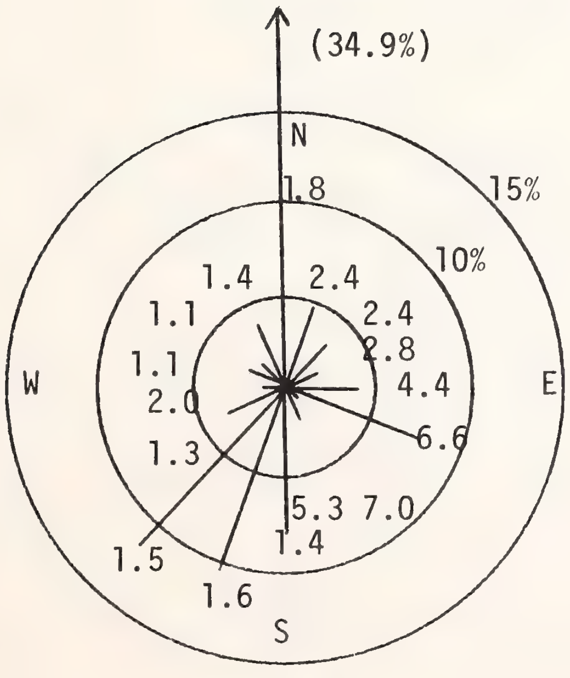


May 1978
Calm 0.0%
(Total hours 675)

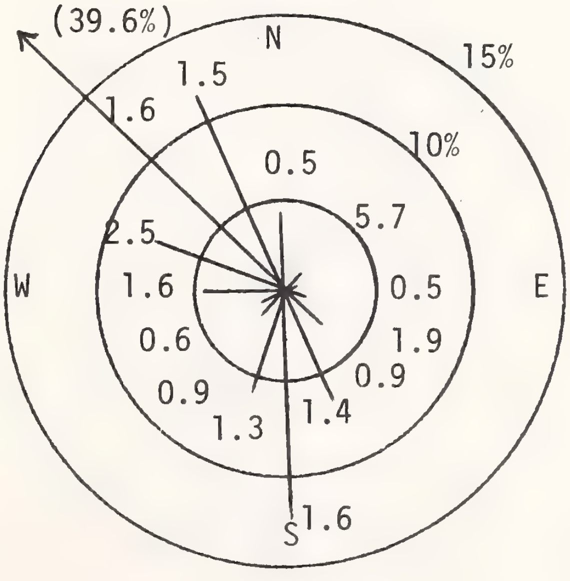


June 1978
Calm 5.8%
(total hours 308)

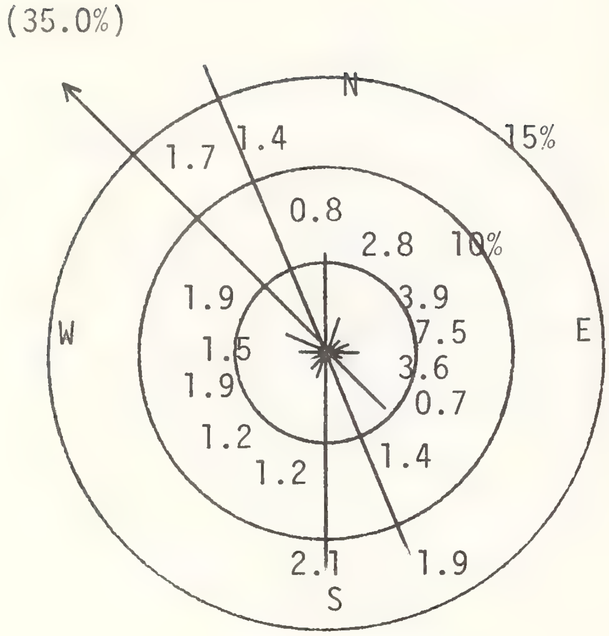
Monthly Wind Roses
Teakettle Mountain Site
Columbia Falls, Montana



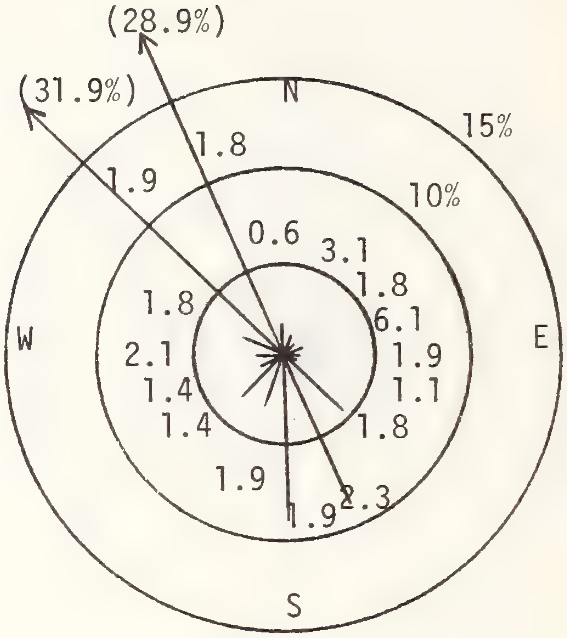
July 1978
Calm 0.0%
(total Hours 186)



August 1978
Calm 0.0%
(Total Hours 187)

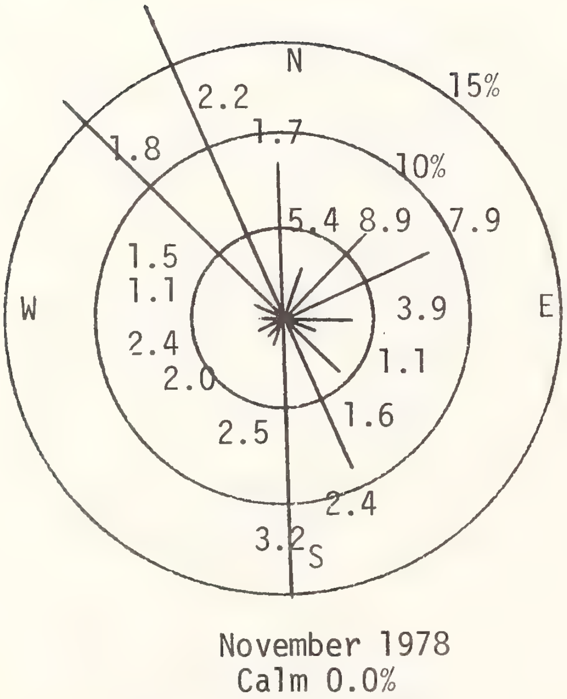


September 1978
Calm 0.0%
(total hours 703)

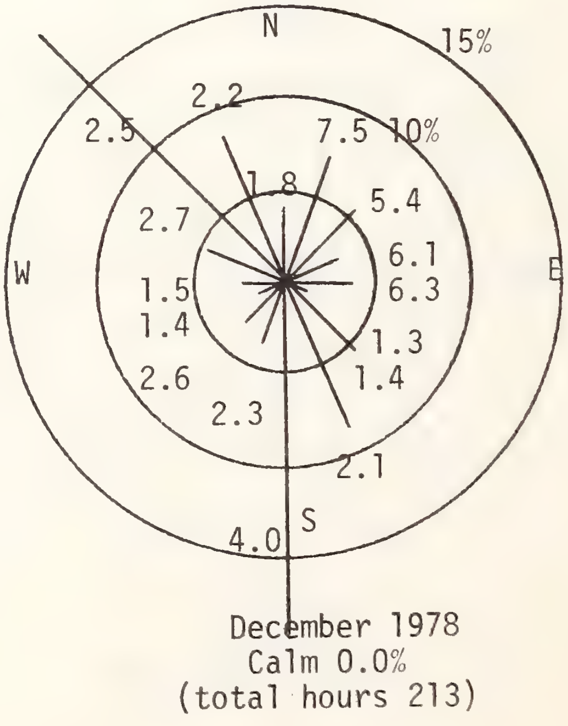


October 1978
Calm 0.0%
(total hours 732)

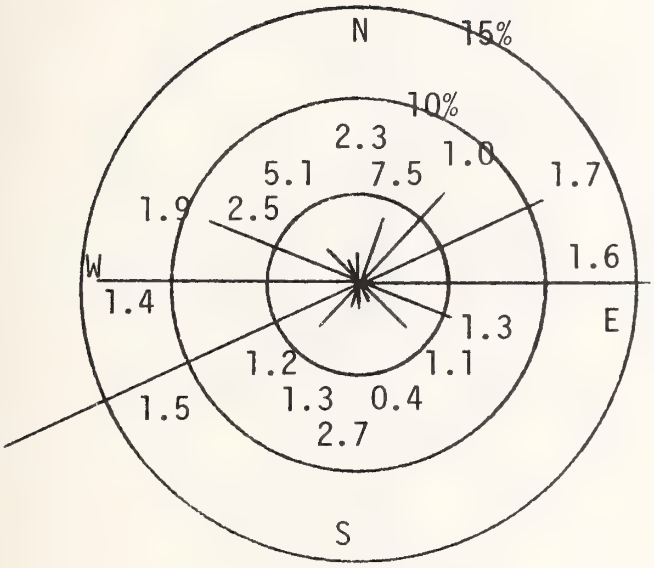
Monthly Wind Roses
Teakettle Mountain Site
Columbia Falls, Montana



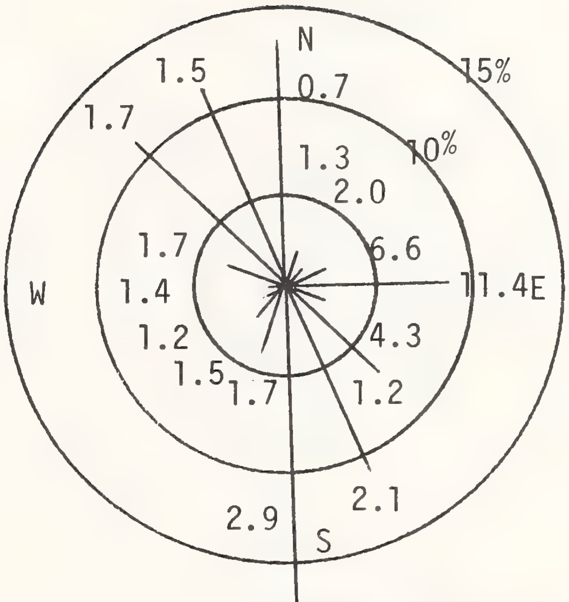
November 1978
Calm 0.0%
(Total Hours 545)



December 1978
Calm 0.0%
(total hours 213)

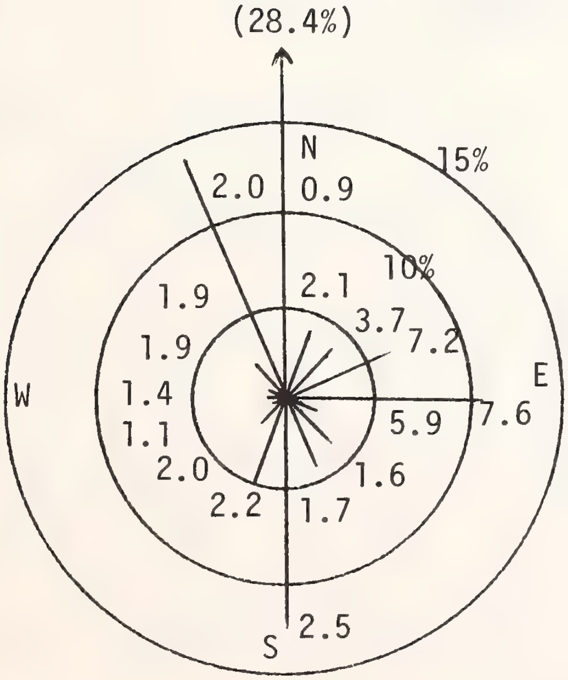


January 1979
Calm 0.2%
(Total Hours 564)

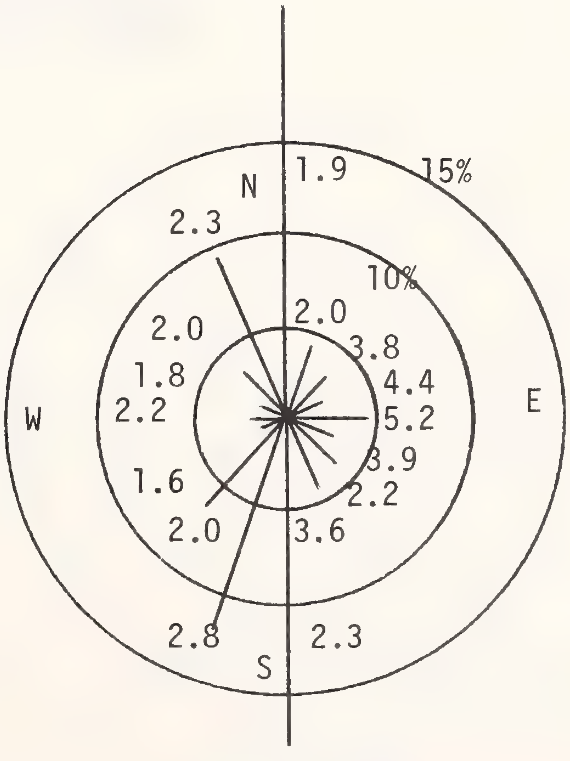


February 1979
Calm 0.5%
(Total Hours 657)

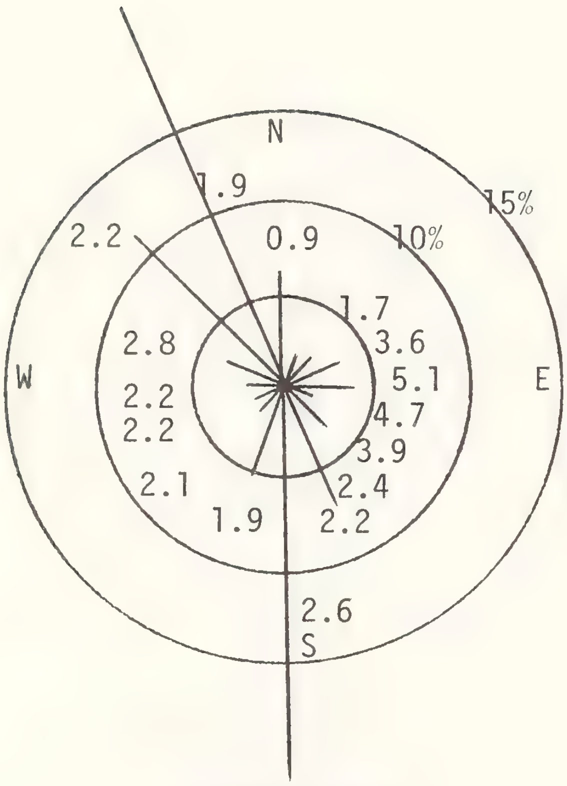
Monthly Wind Roses
Teakettle Mountain Site
Columbia Falls, Montana



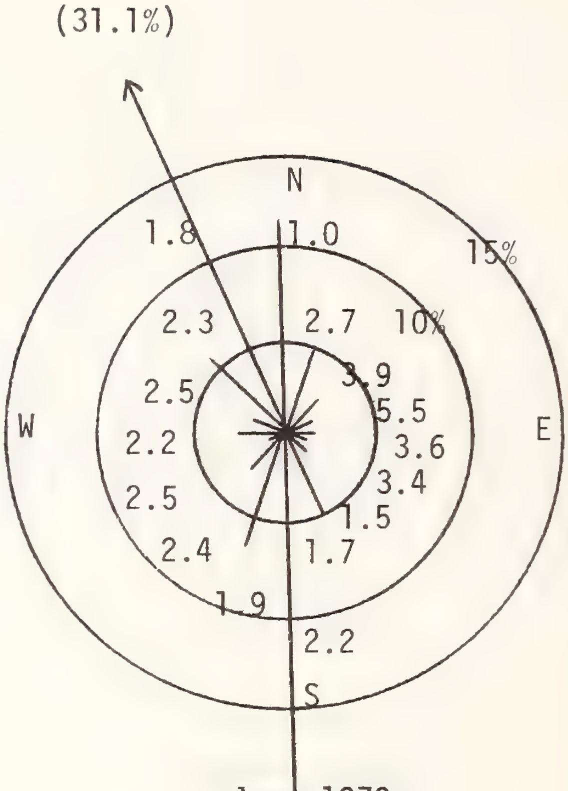
March 1979
Calm 0.1%
(Total Hours 731)



April 1979
Calm 1.7%
(Total Hours 693)

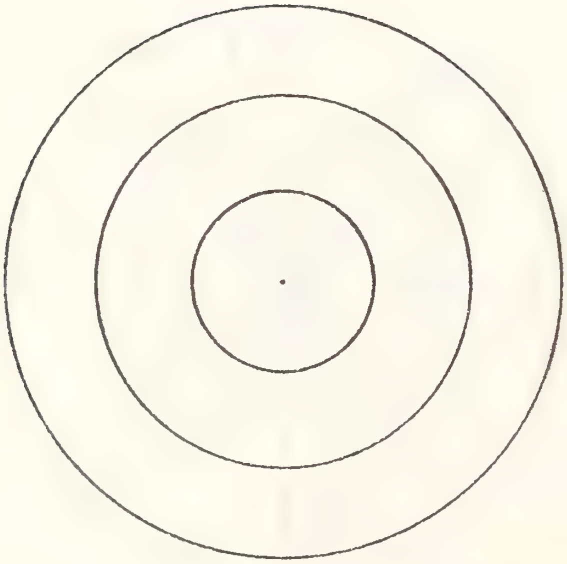


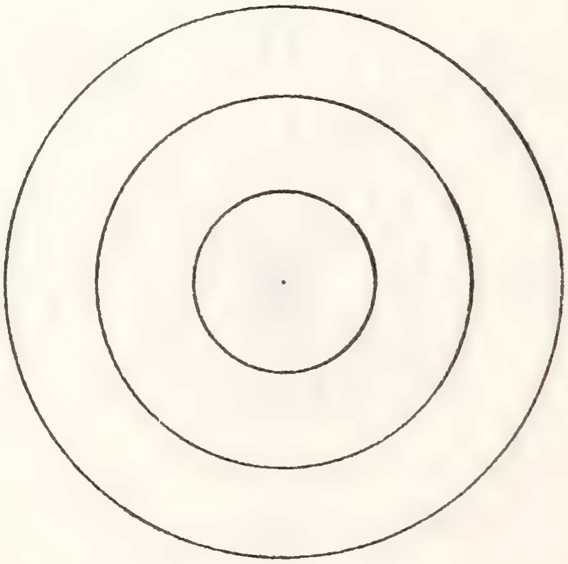
May 1979
Calm 1.4%
(Total Hours 720)

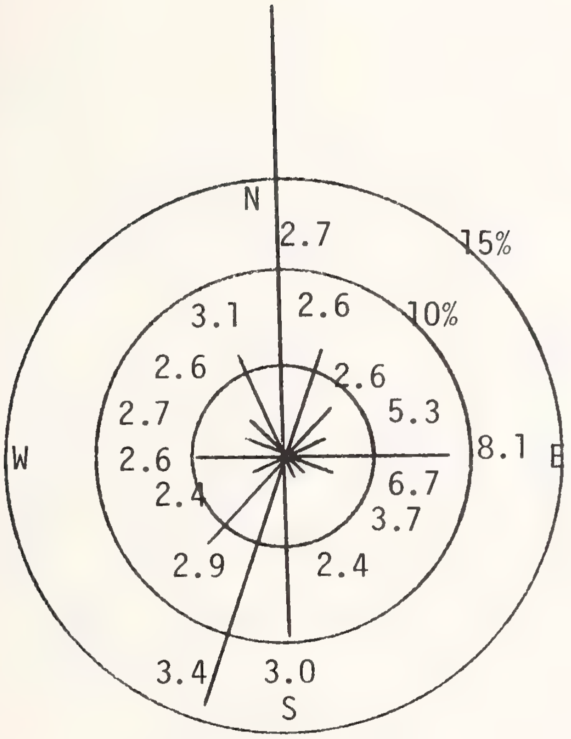


June 1979
Calm 1.3%
(Total Hours 699)

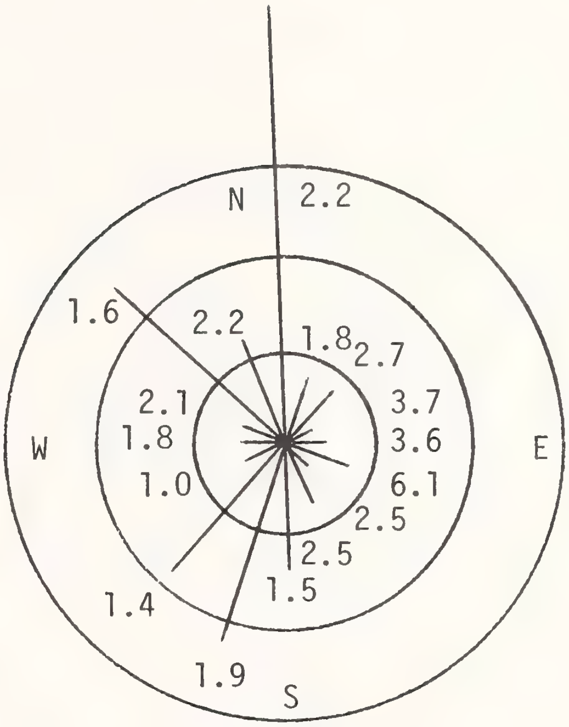
Monthly Wind Roses
Teakettle Mountain Site
Columbia Falls, Montana





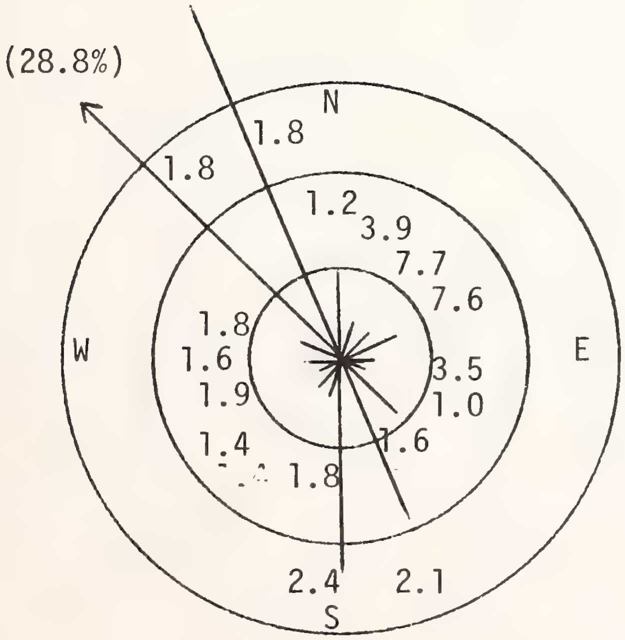


Spring 1978
Calm 0.0%
(Total Hours 2084)

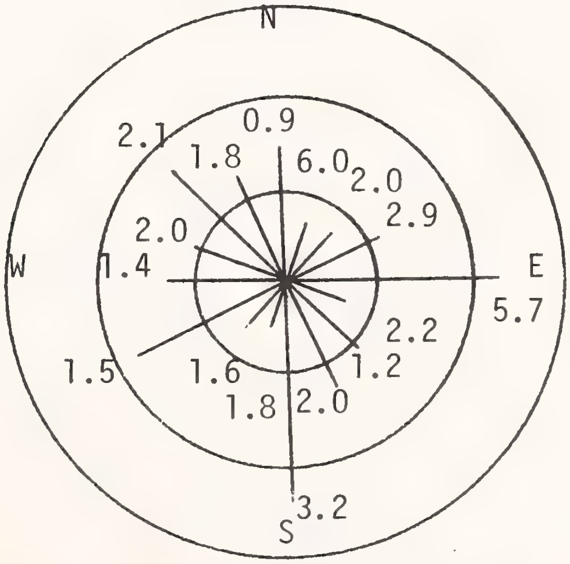


Summer 1978
Calm 2.6%
(Total Hours 681)

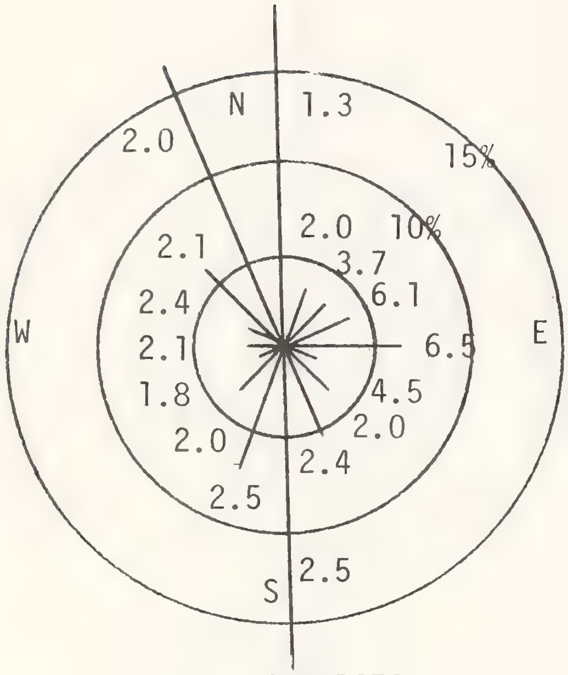
Seasonal Wind Roses
Teakettle Mountain Site
Columbia Falls, Montana



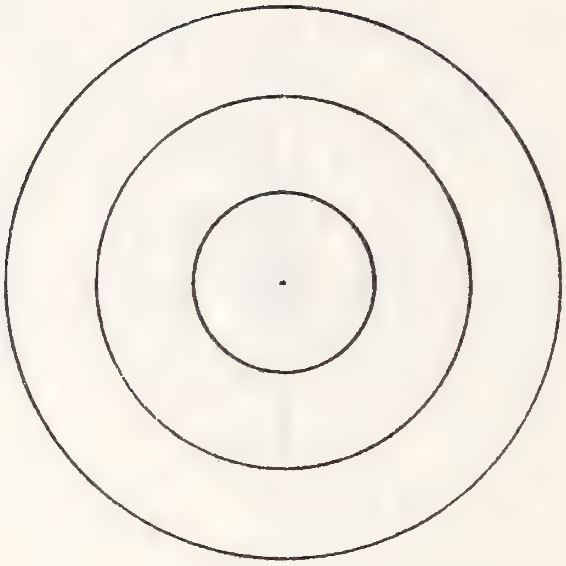
Autumn 1978
Calm 0.0%
(Total Hours 1980)



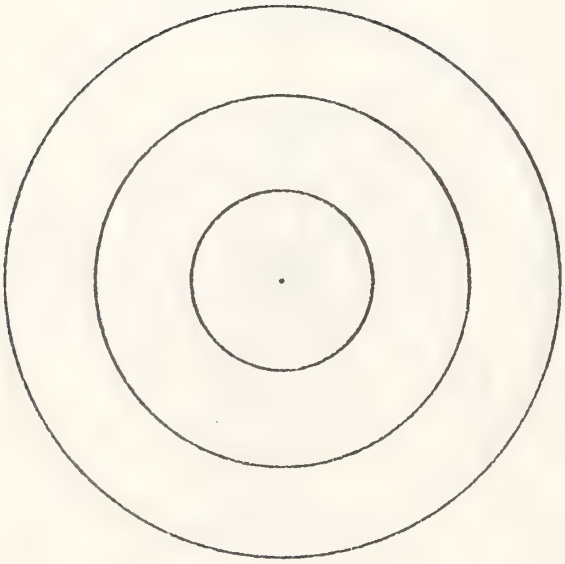
Winter 1978-79
Calm 0.3%
(Total Hours 1434)

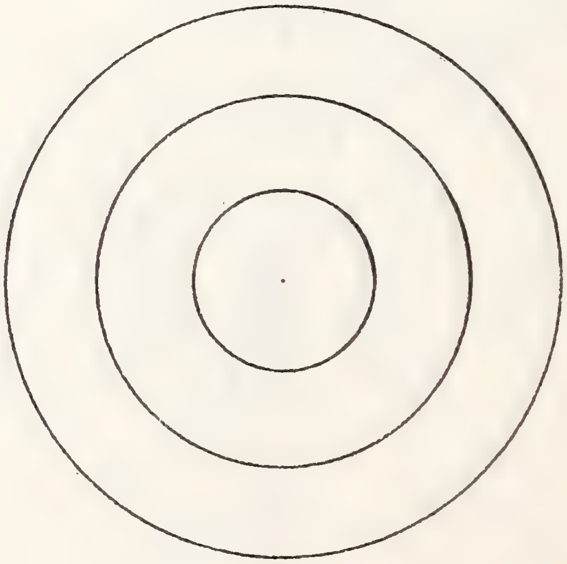


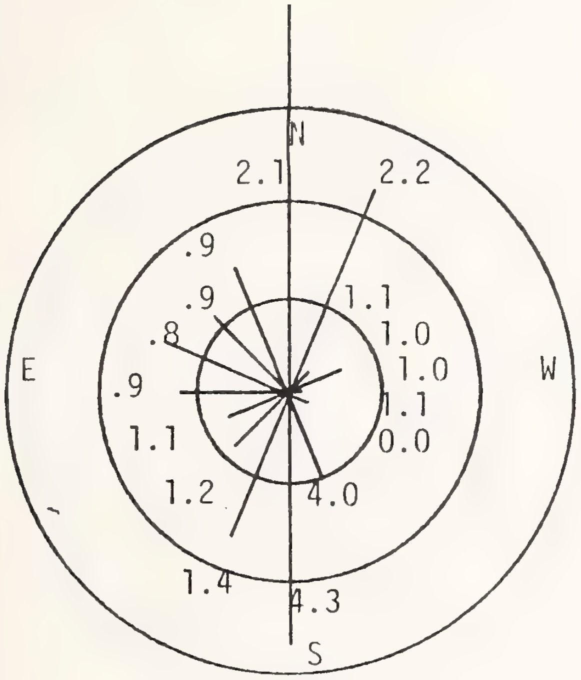
Spring 1979
Calm 1.1%
(Total Hours 2144)



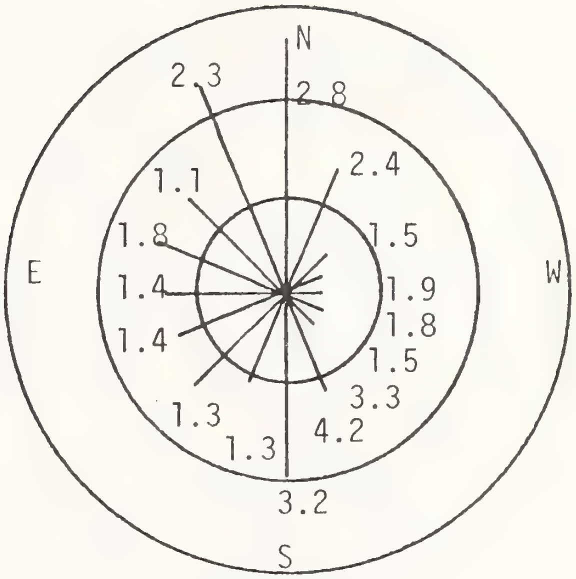
Seasonal Wind Roses
Teakettle Mountain Site
Columbai Falls, Montana





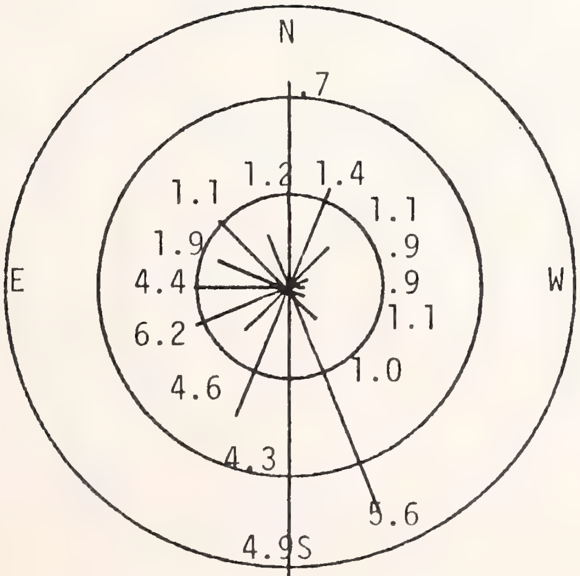


January 1978
Calm 0%
(Total Hours 301)

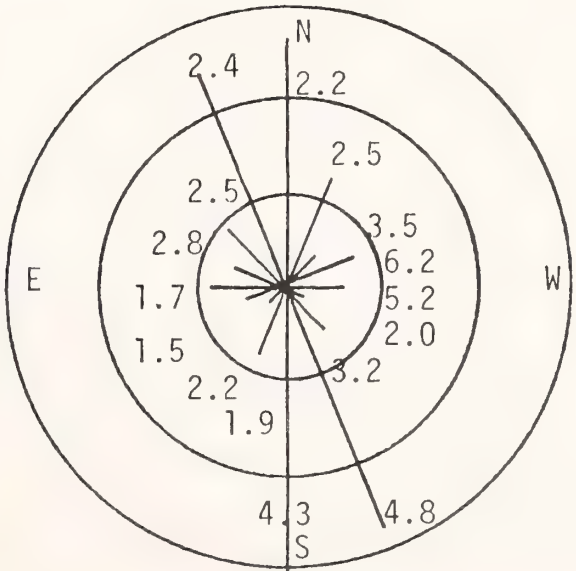


February 1978
Calm 0%
(Total Hours 574)

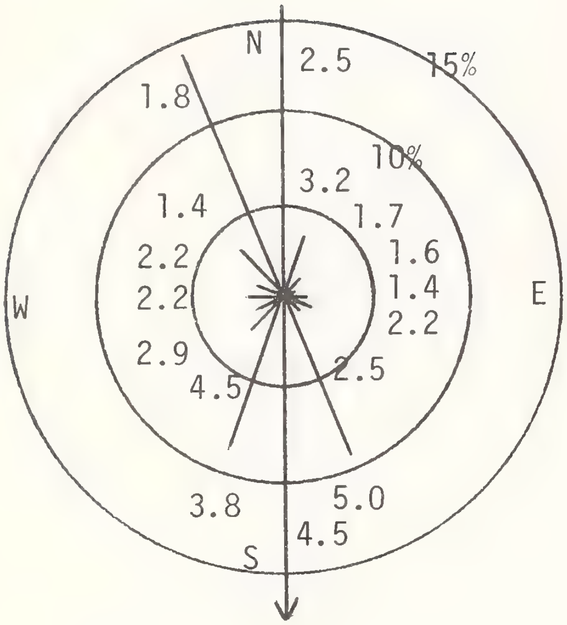
Figu
Monthly Wind Roses
GEIS Site
Columbia Falls, Montana



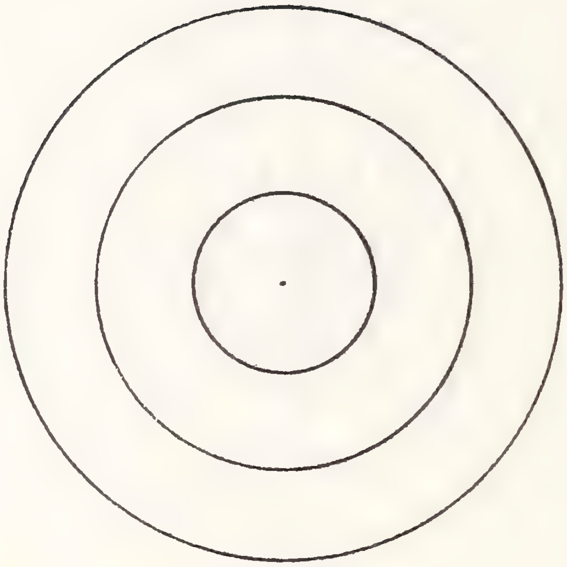
March 1978
Calm 0%
(Total Hours 220)



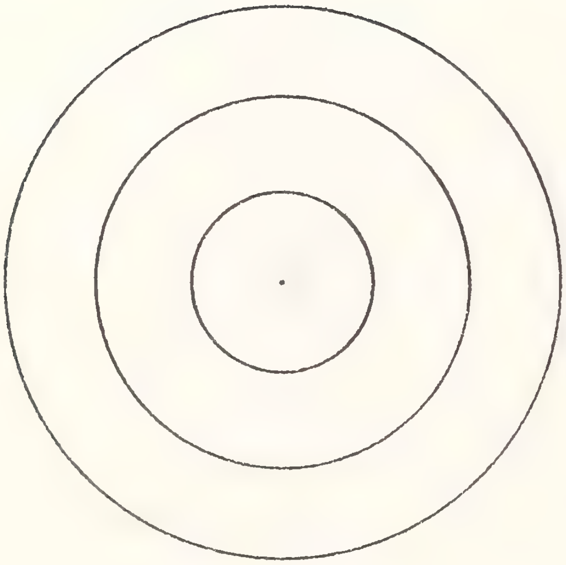
April 1978
Calm 0%
(Total Hours 312)

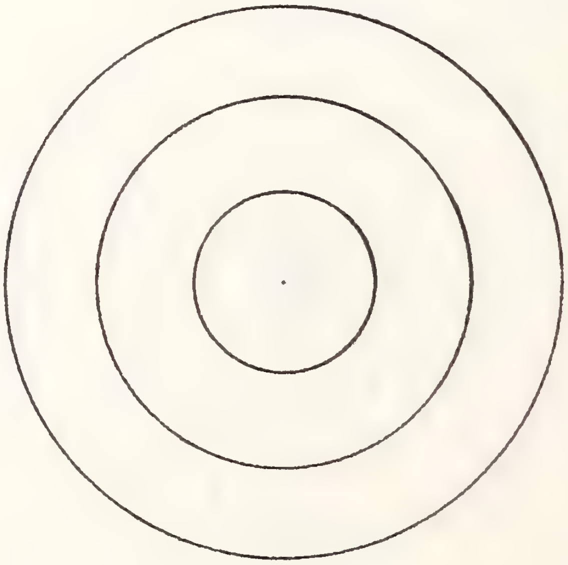


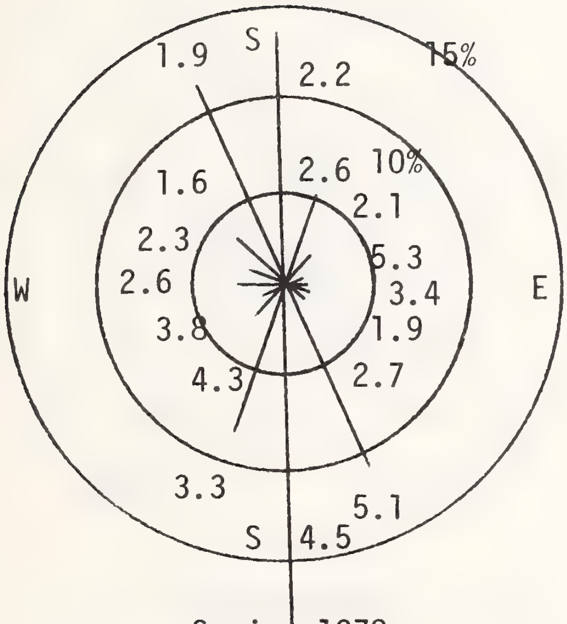
May 1978
Calm 0.0%
(Total Hours 697)



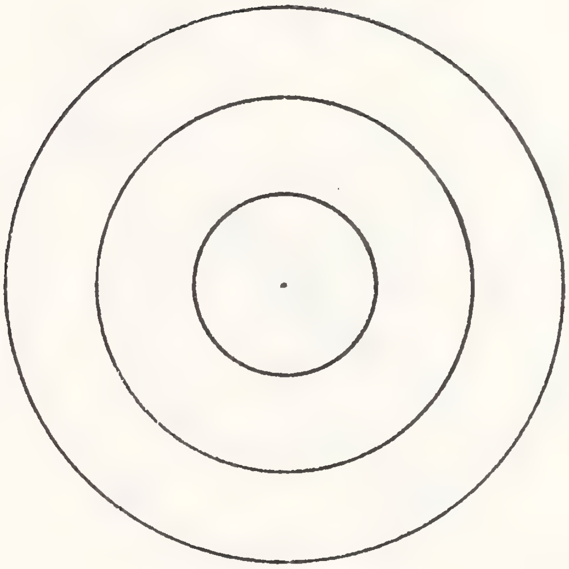
Monthly Wind Roses
Geis Site
Columbia Falls, MT



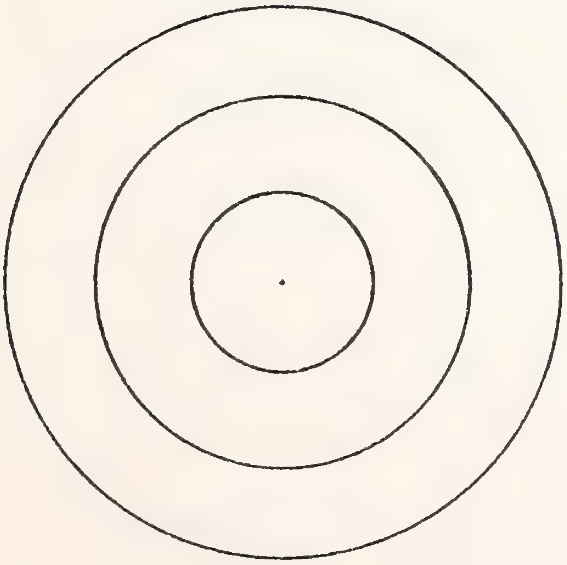


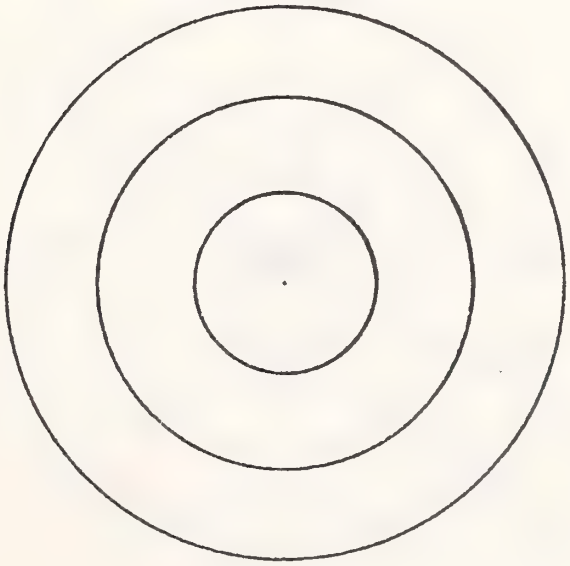


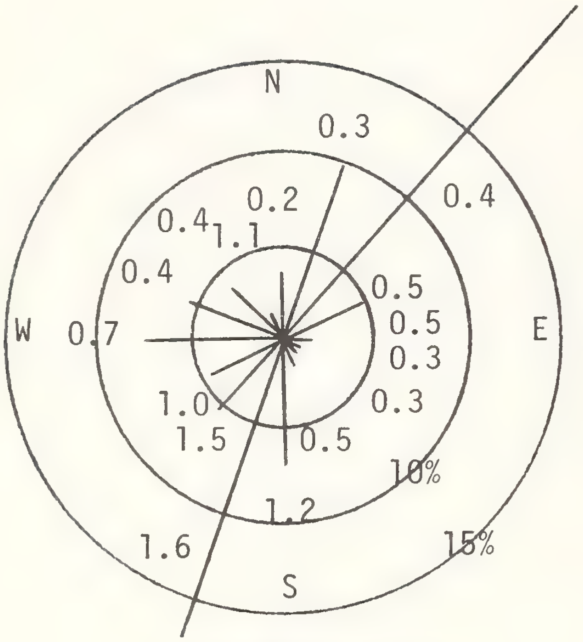
Spring 1978
Calm 0.0%
(Total Hours 1229)



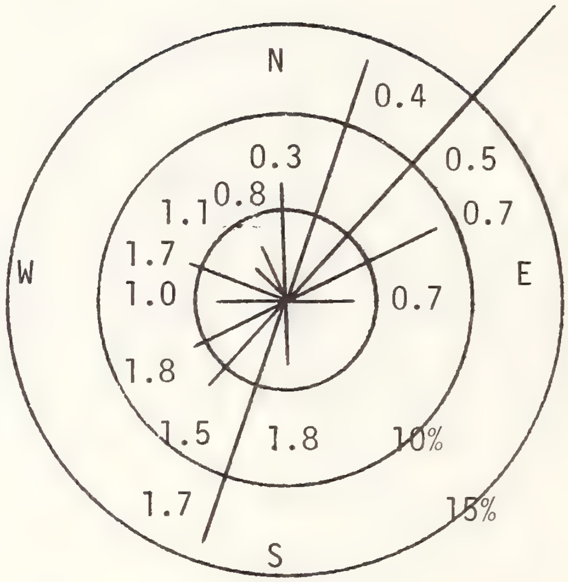
Seasonal Wind Roses
Geis Site
Columbia Falls, MT





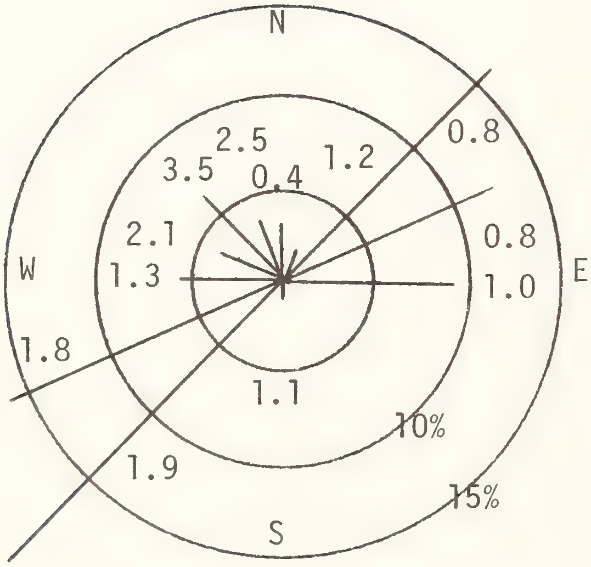


September 1978
Calm 0.4%
(Total Hours 233)

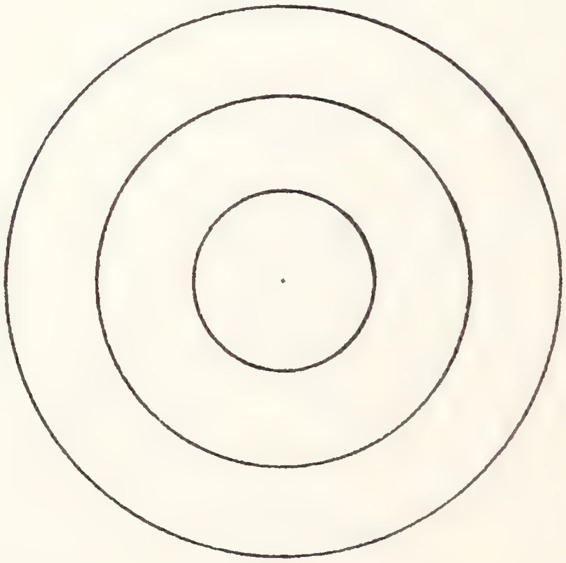


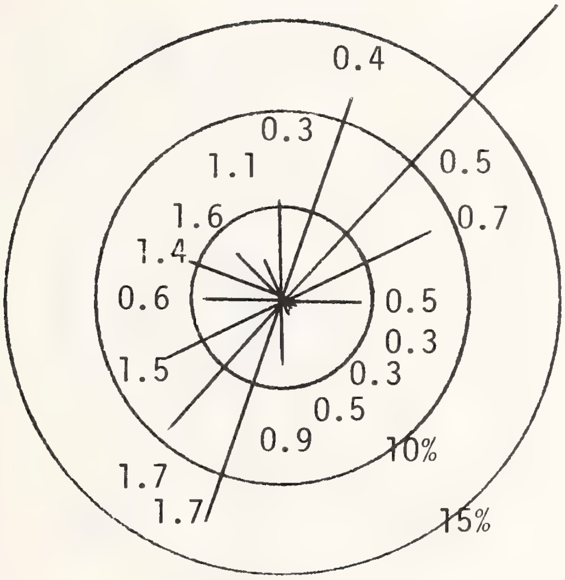
October 1978
Calm 3.4%
(Total Hours 498)

Monthly Wind Roses
Polebridge Ranger Station
Polebridge, MT

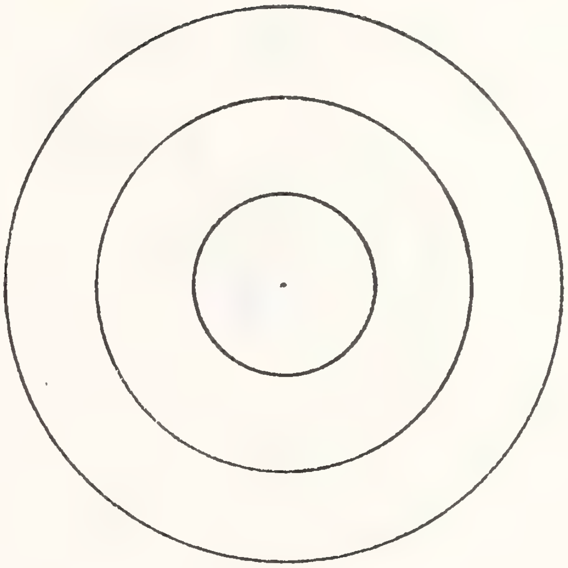


November 1978
Calm 0.0%
(Total Hours 144)

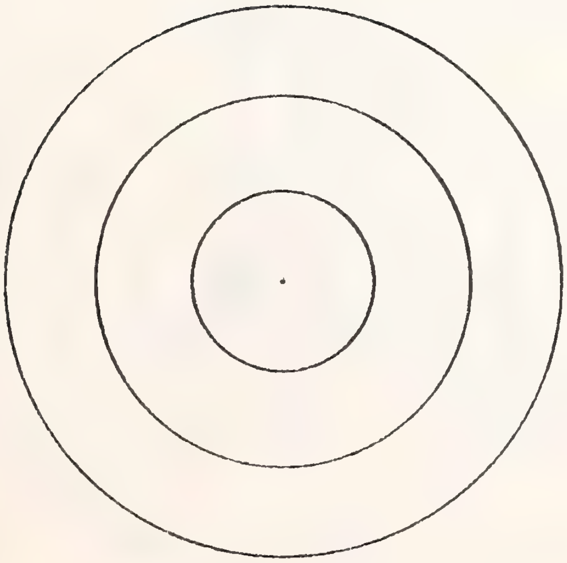


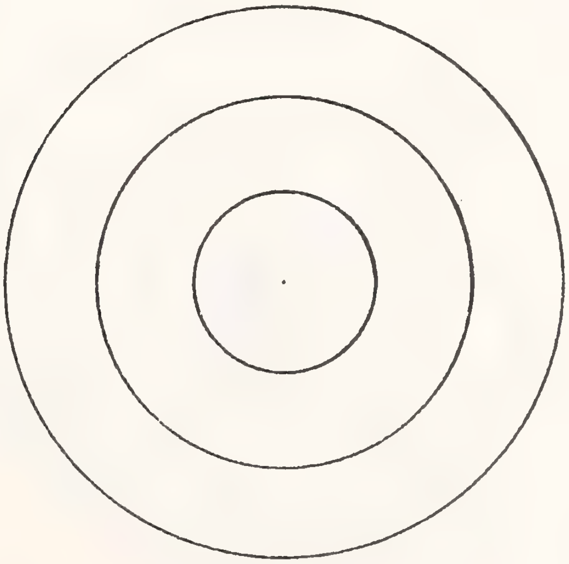


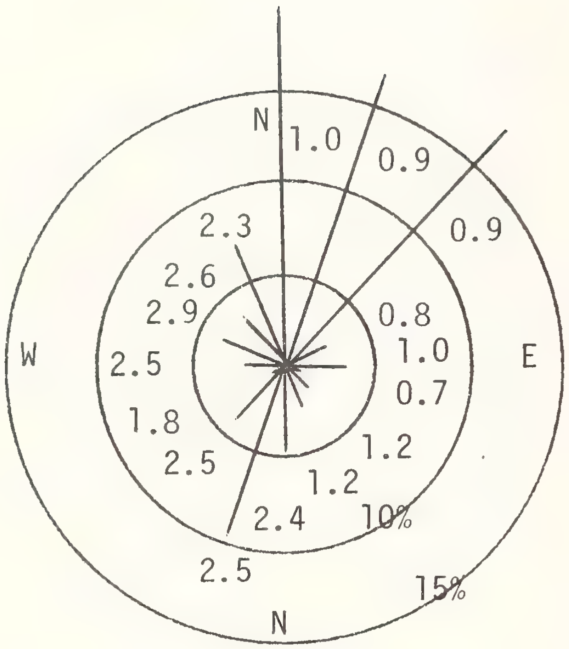
Autumn 1978
Calm 2.1%
(Total Hours 875)



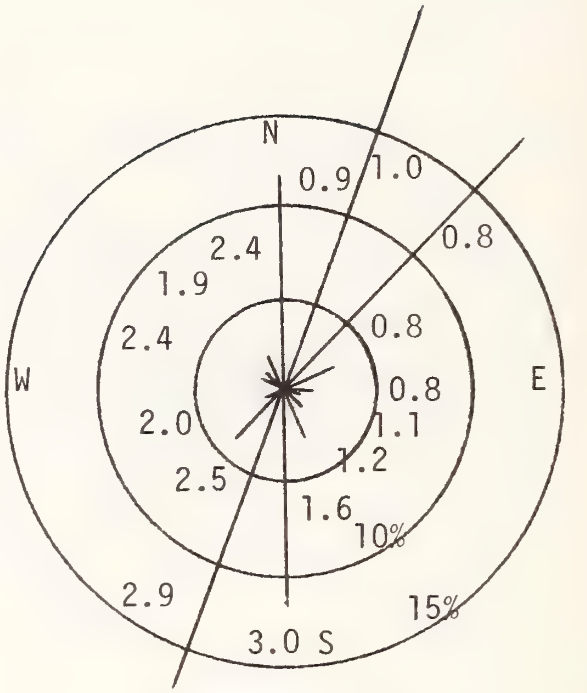
Seasonal Wind Roses
Polebridge Ranger Station
Polebridge, Montana





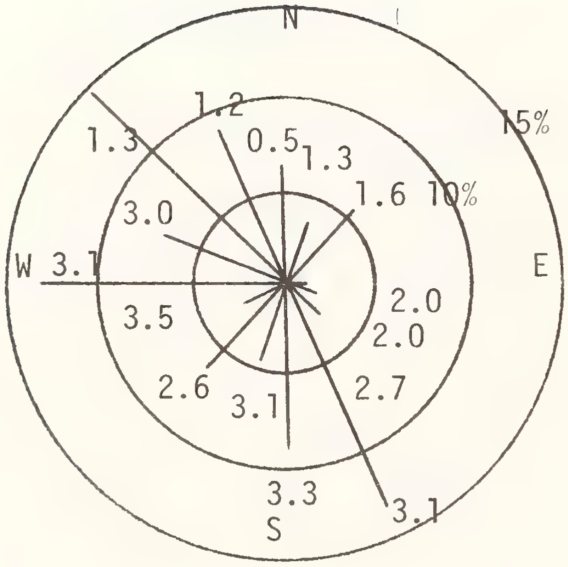


November 1978
Calm 0.0%
(Total Hours 482)

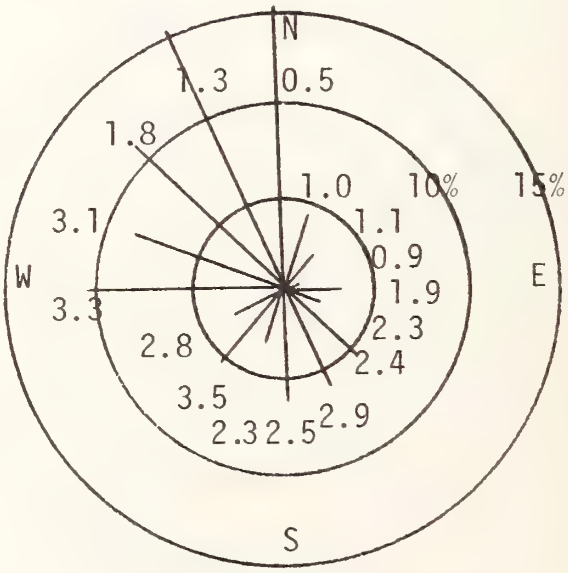


December 1978
Calm 0.0%
(Total Hours 228)

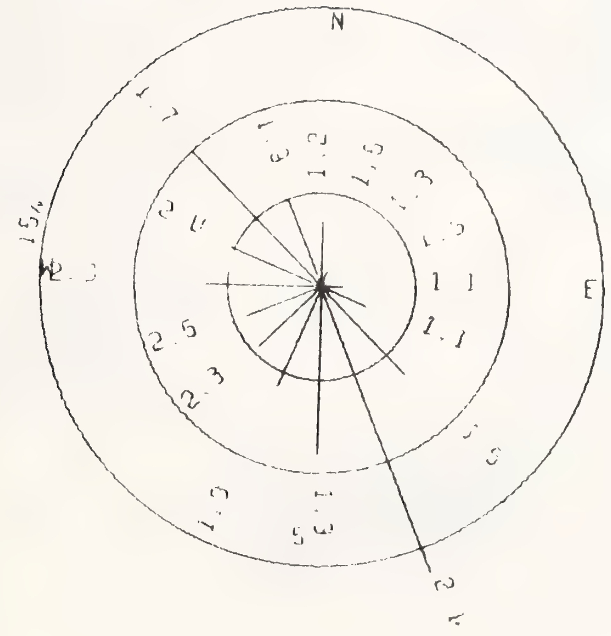
Monthly Wind Roses
Big Prairie Site
Polebridge, Montana



May 1979
Calm 8.8%
(total Hours 114)

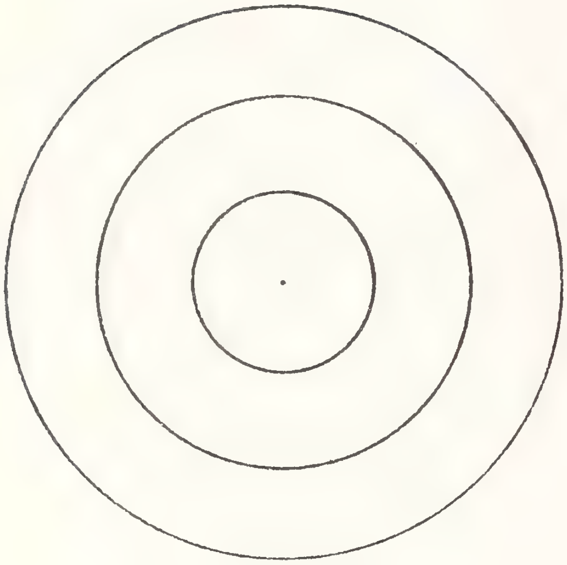


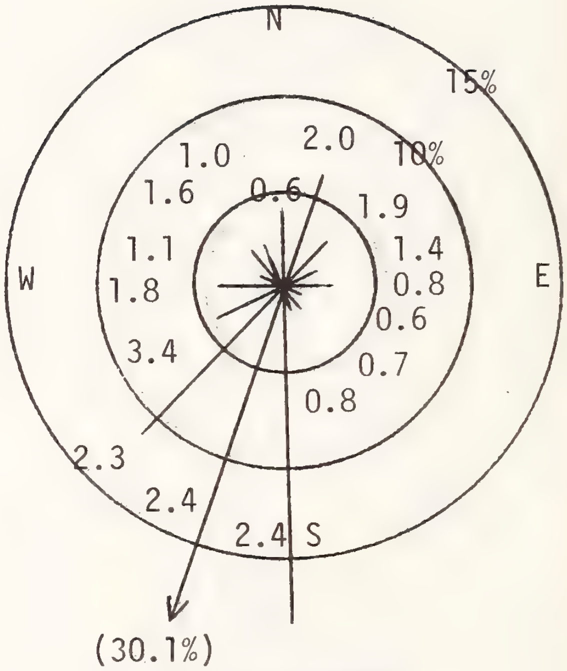
June 1979
Calm 6.2%
(total hours 356)



June-September 1980

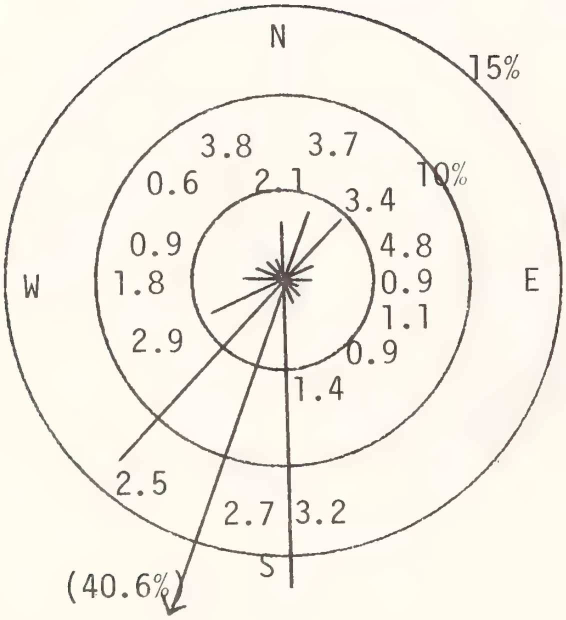
Seasonal Wind Rose
Big Prairie Site
Polebridge, Montana



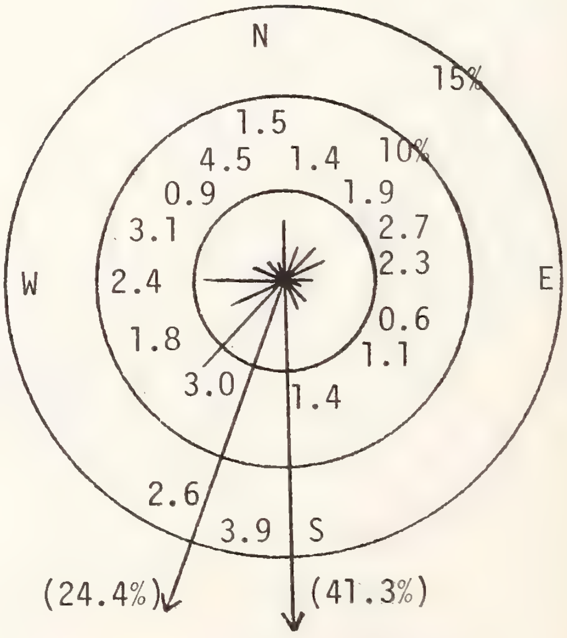


October 1978
Calm 0.0%
(Total Hours 288)

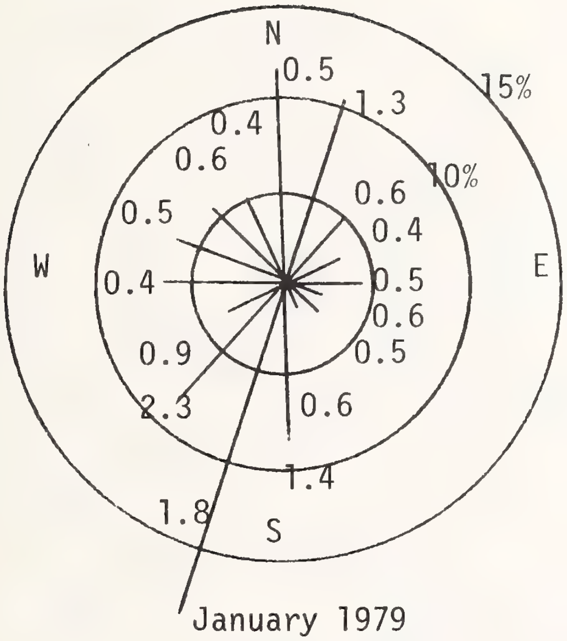
Monthly Wind Roses
Big Sky Stables
Polson, Montana



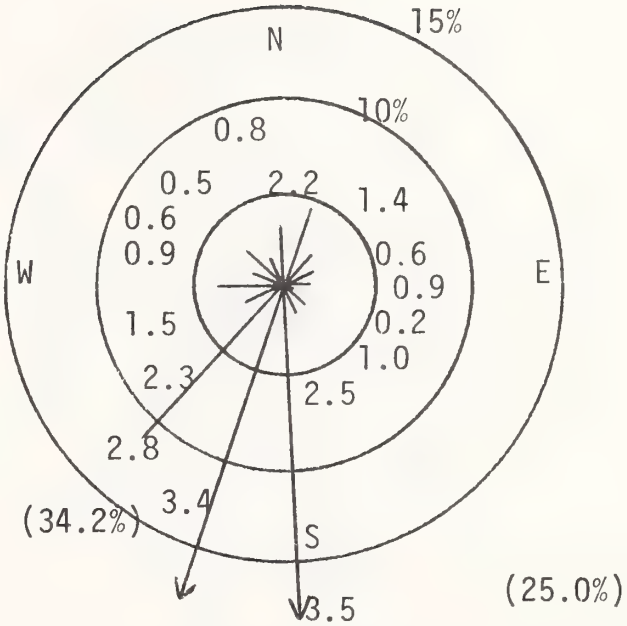
November 1978
Calm 0.0%
(Total Hours 689)



December 1978
Calm 0.0%
(Total Hours 364)

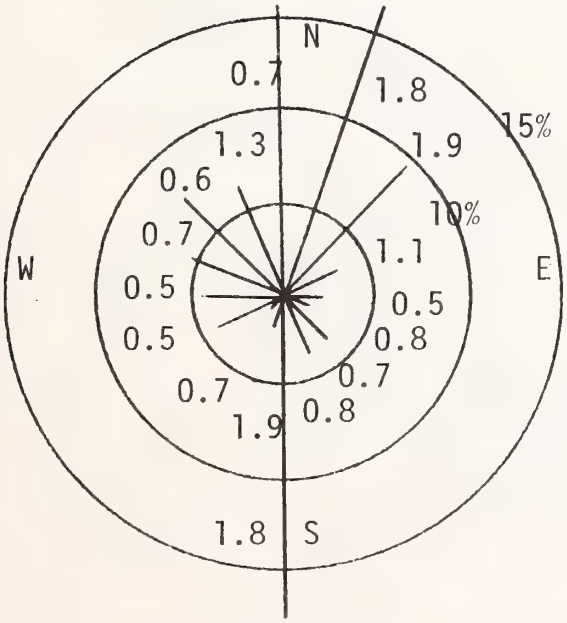


January 1979
Calm 5.0%
(Total Hours 539)

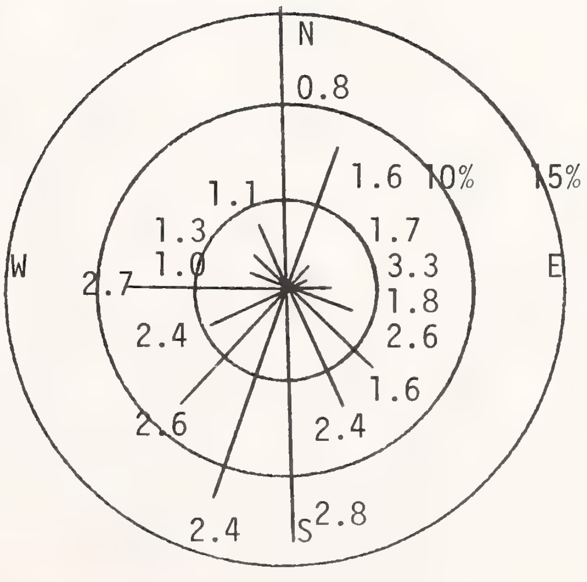


February 1979
Calm 1.1%
(Total Hours 464)

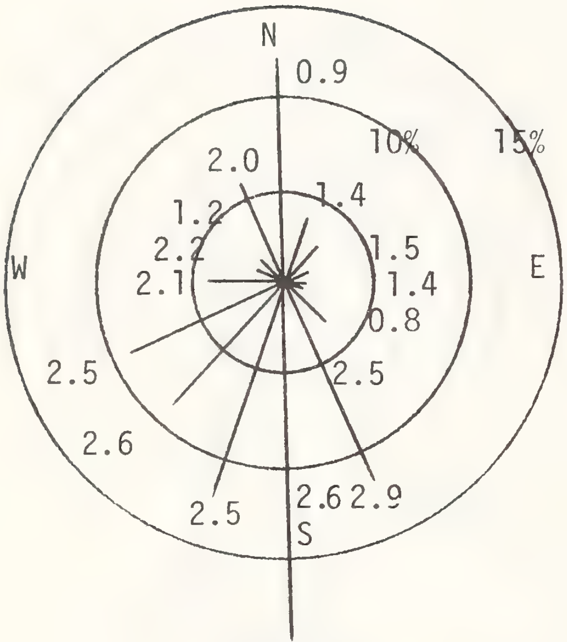
Monthly Wind Roses
Big Sky Stables
Polson, Montana



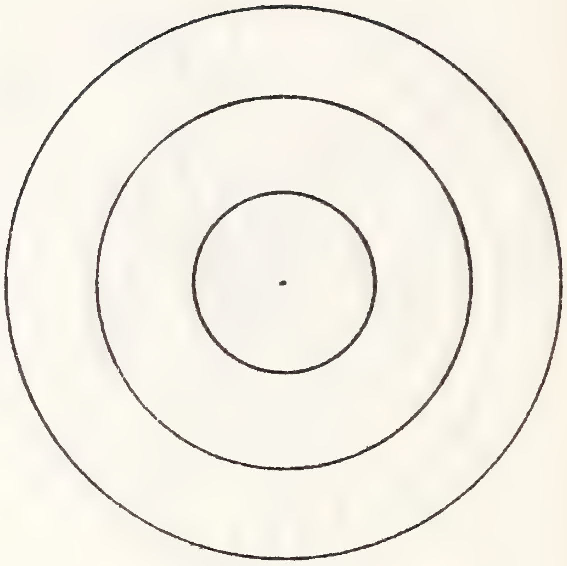
March 1979
Calm 15.9%
(Total Hours 176)



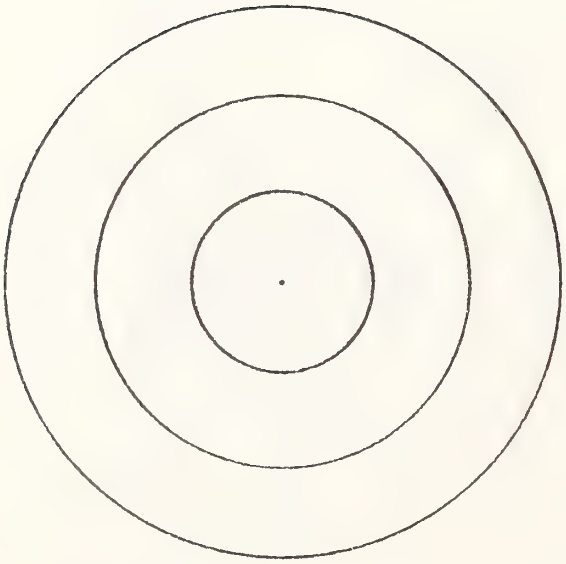
April 1979
Calm 0.4%
(Total Hours 246)

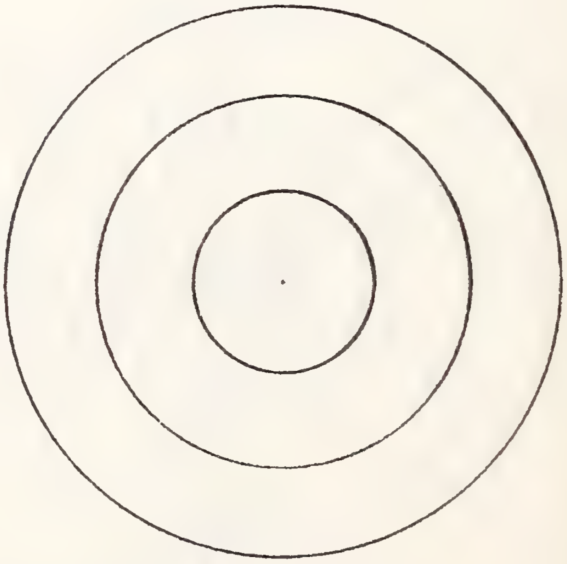


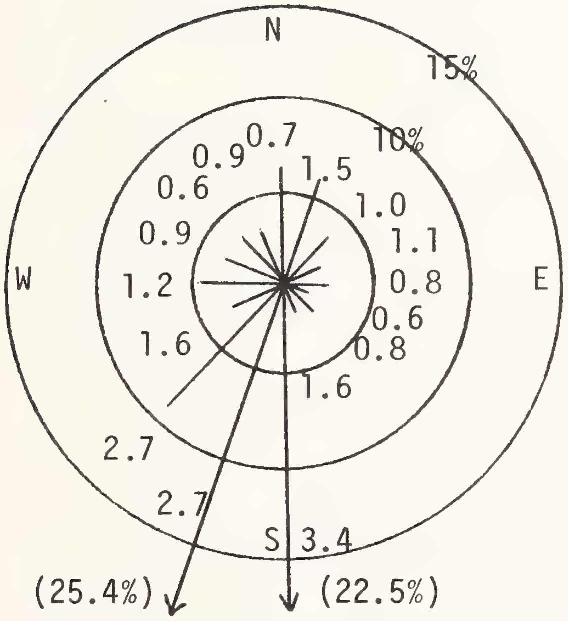
May 1979
Calm 2.6%
(Total Hours 573)



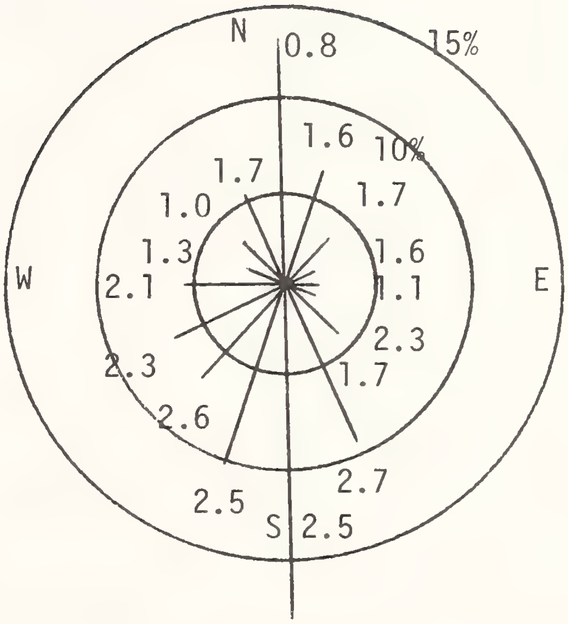
Monthly Wind Roses
Big Sky Stables
Polson, Montana





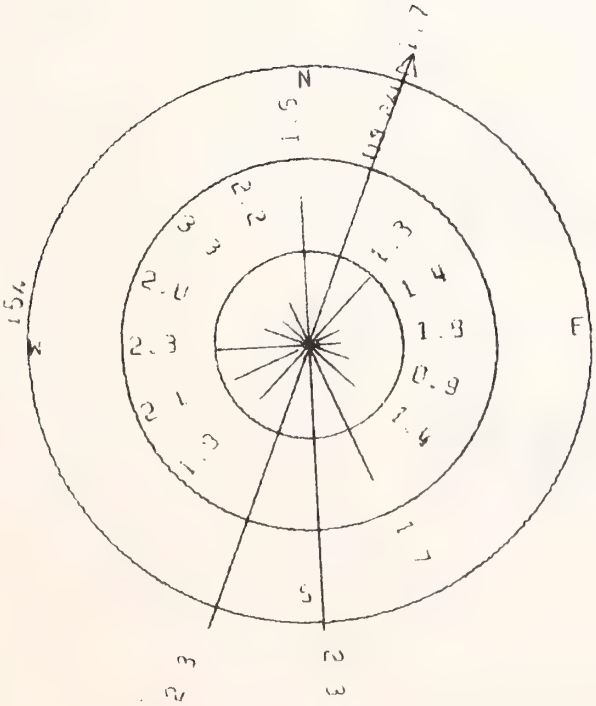


Winter 1978-79
Calm 2.3%
(Total Hours 1367)

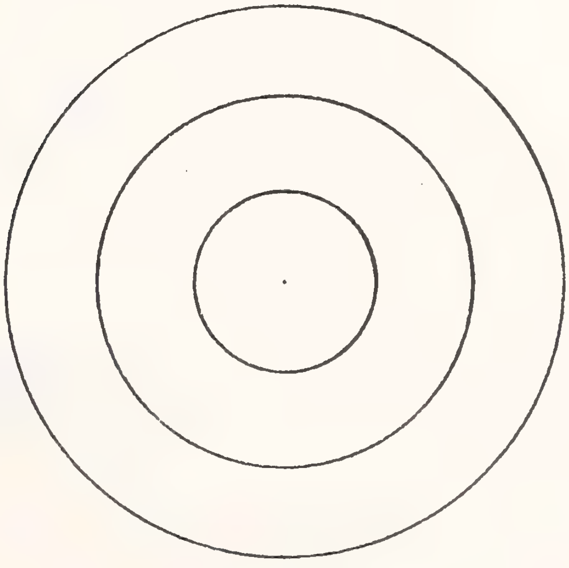


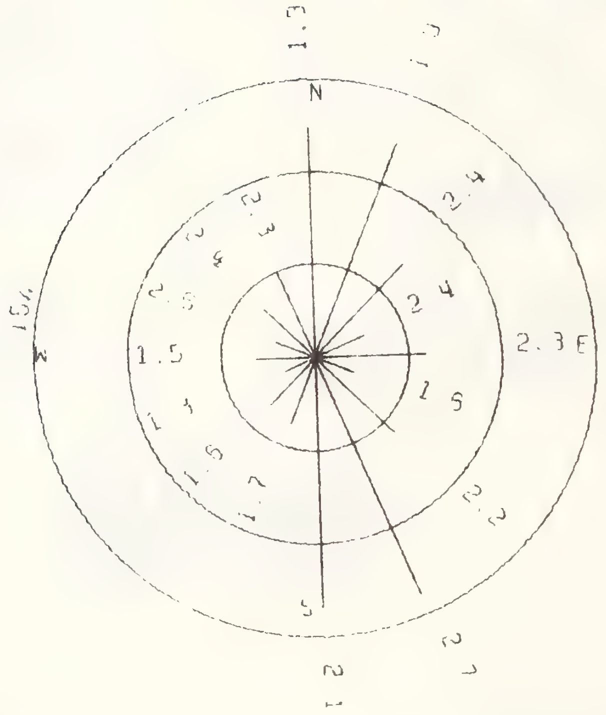
Spring 1979
Calm 4.4%
(Total Hours 995)

Seasonal Wind Roses
Big Sky Stables
Polson, Montana



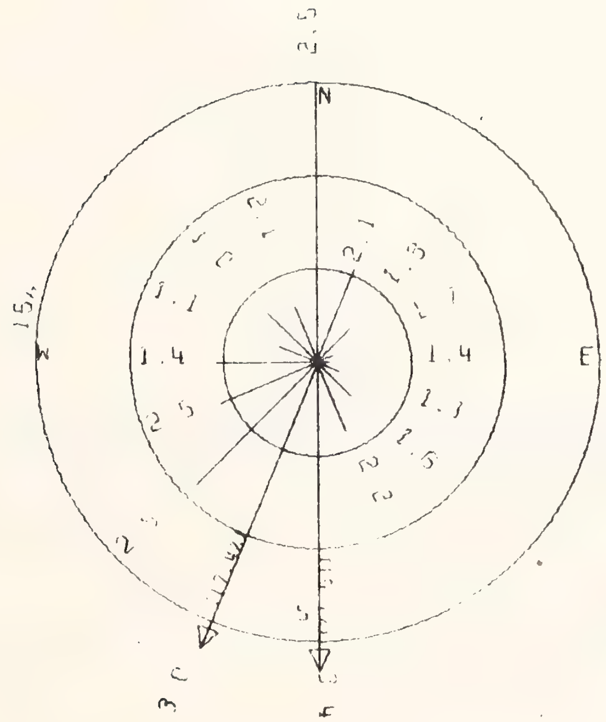
Summer 1980
Calm 0.4%
(Total Hours 1410)





January - April 1980

Surface Wind Rose
Bigfork, Montana

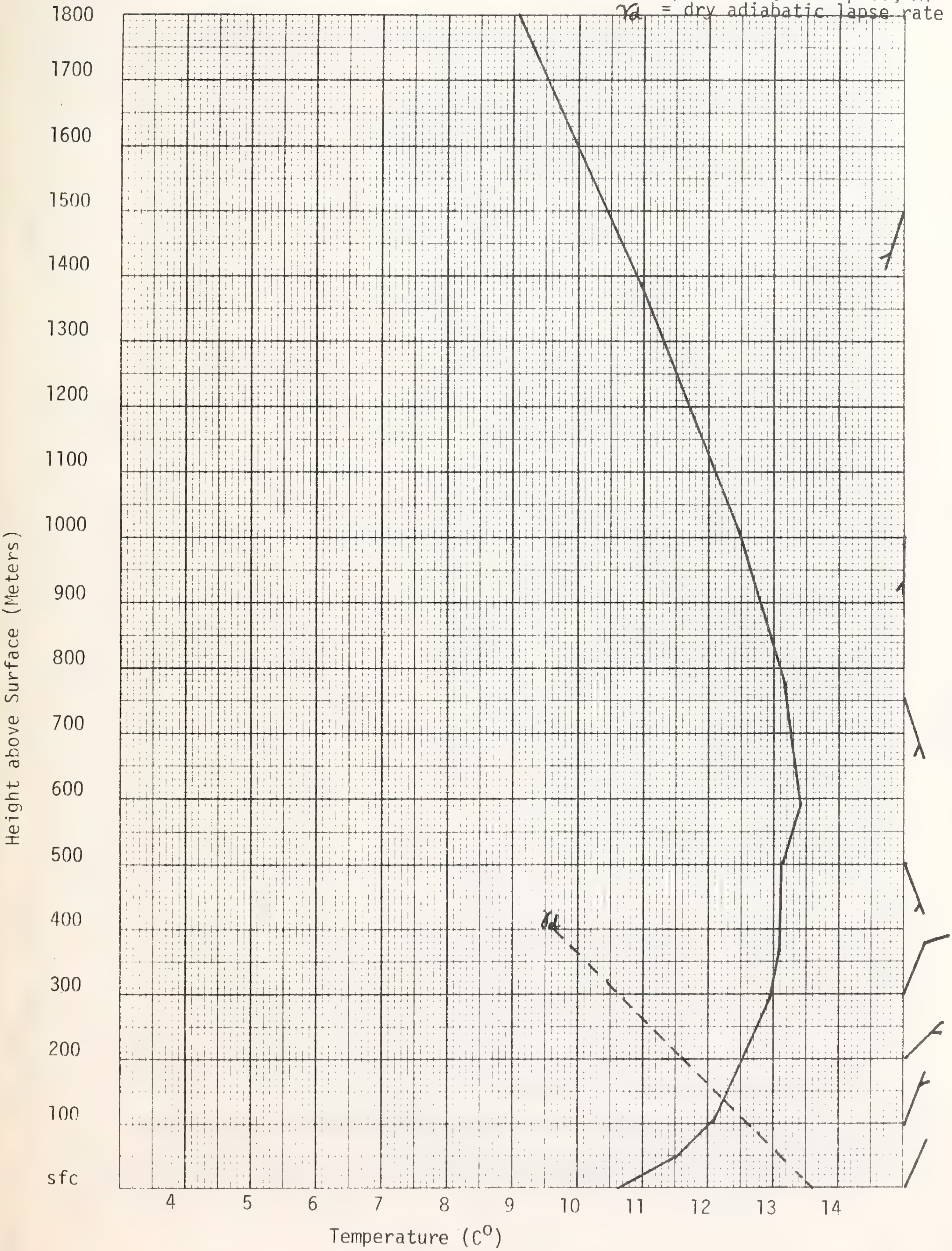


January - June 1980

Surface Wind Rose
Ronan, Montana

APPENDIX B

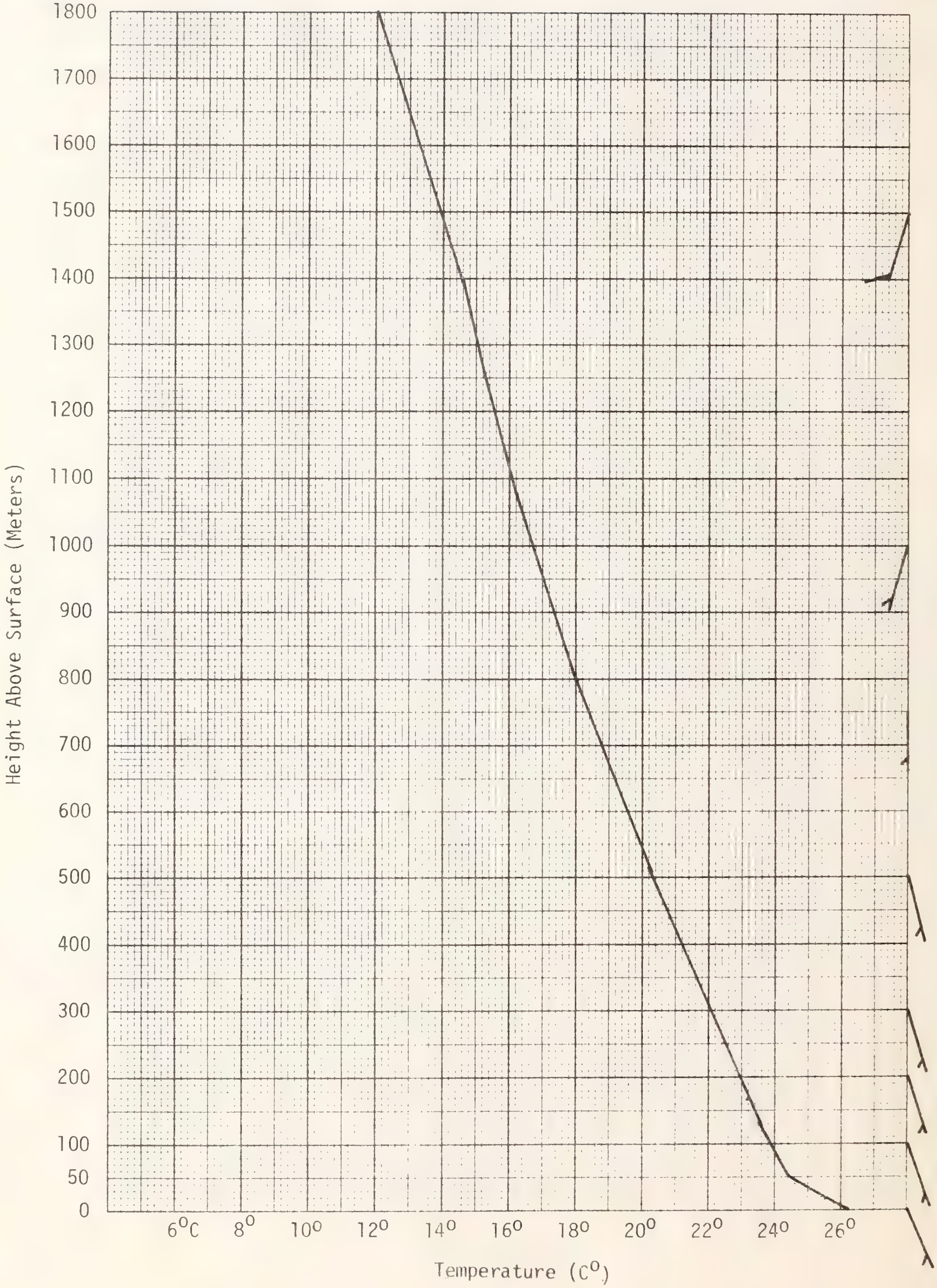
MONTHLY TEMPERATURE SOUNDINGS



July, 1978
Morning Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT

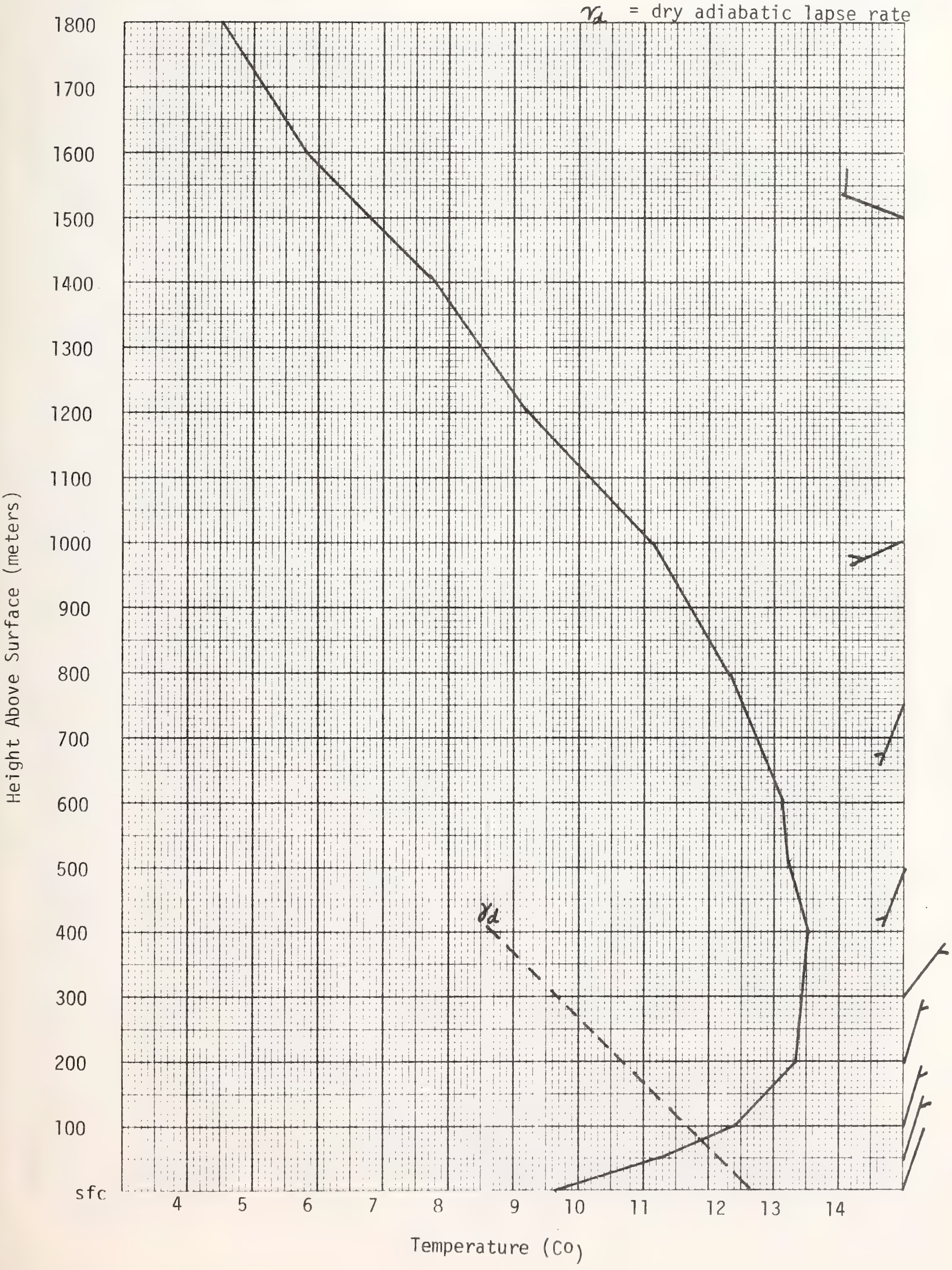
CLEARPRINT PAPER CO. NO. C310 20 DIVISIONS PER INCH BOTH WAYS 120 BY 180 DIVISIONS
CLEARPRINT CHARTS
PRINTED IN U.S.A. BY CLEARPRINT TECHNICAL PAPER INC

July 1978
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT



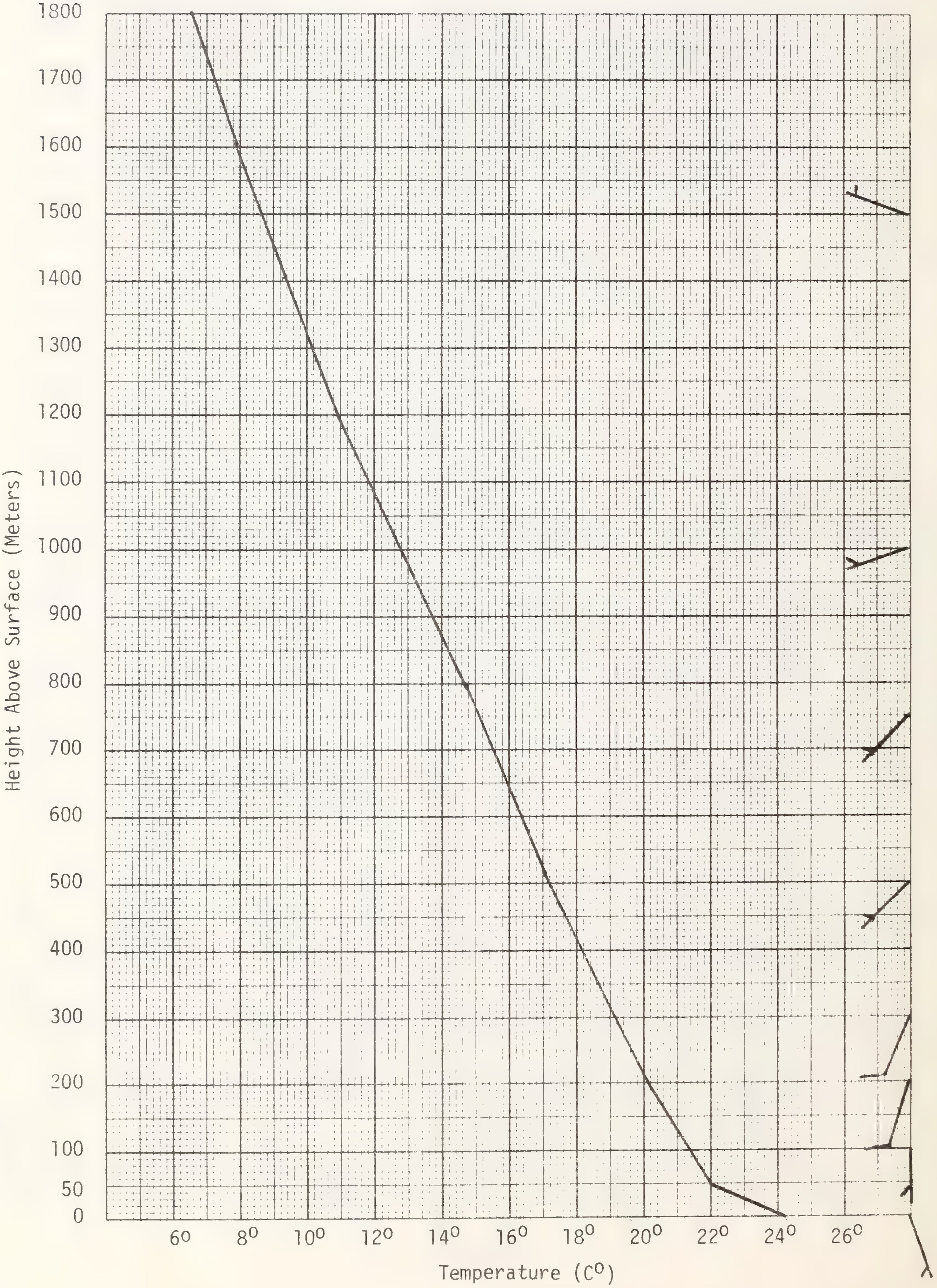
CLEARPRINT PAPER CO. NO. C310. 20 DIVISIONS PER INCH BOTH WAYS. 120 BY 180 DIVISIONS.
CLEARPRINT CHARTS
PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER NO. 1015

August 1978
Monthly Morning Average
Upper Air Sounding
Airport Site, Kalispell, Montana



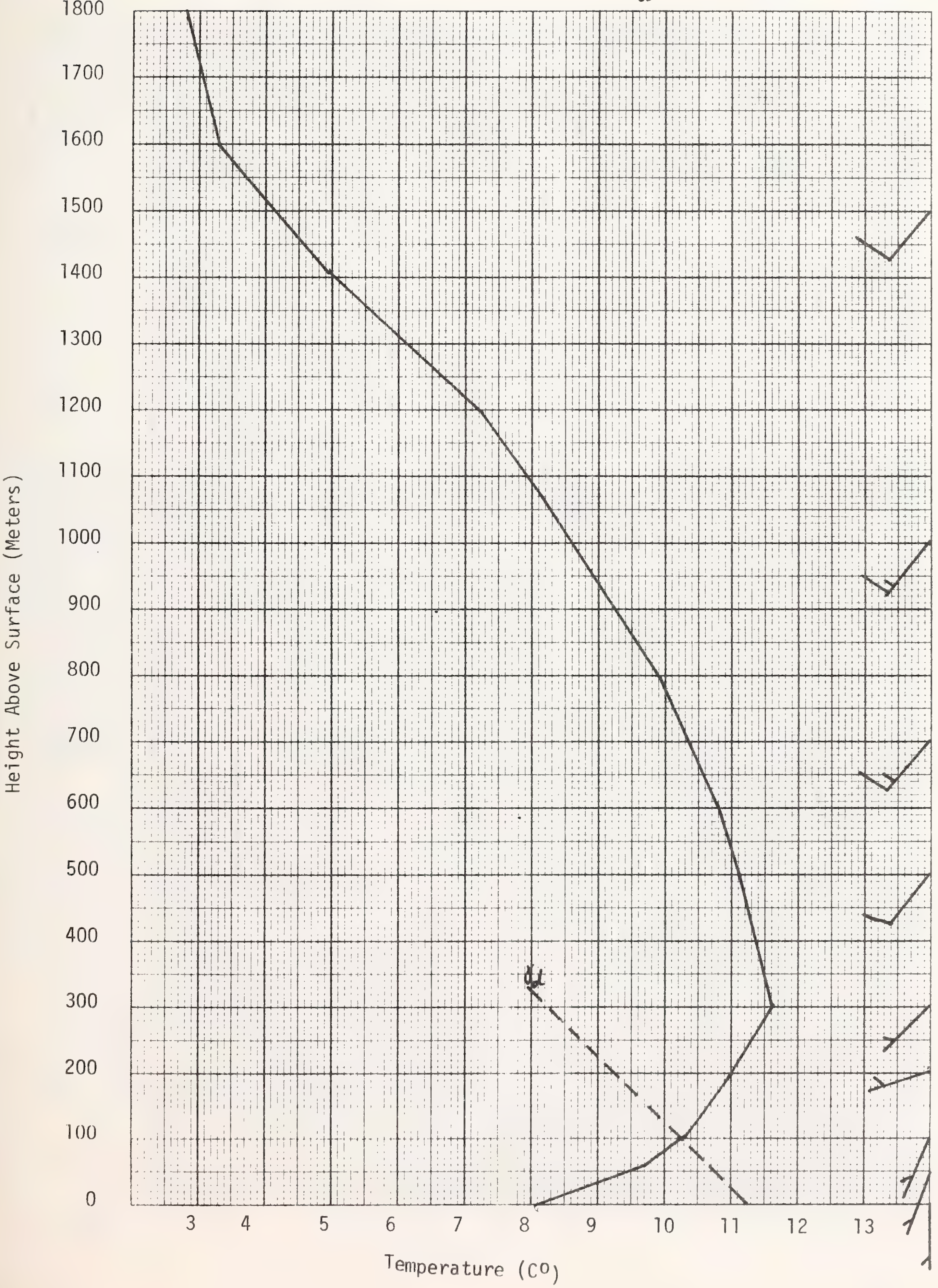
CLEARPRINT PAPER CO. 20 DIVISIONS PER INCH BOTH WAYS 120 BY 180 DIVISIONS CLEARPRINT CHARTS PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER

August 1978
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT



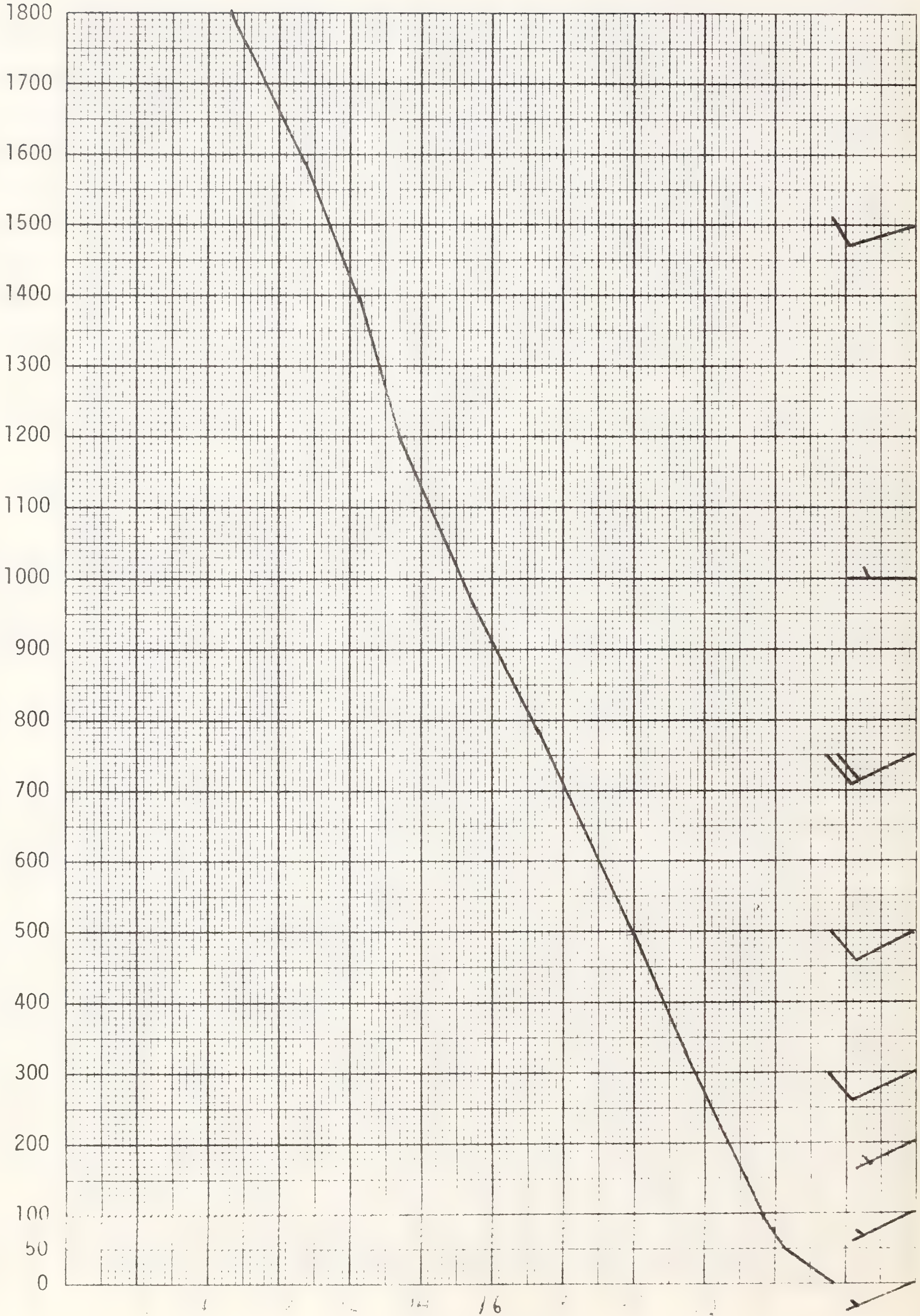
CLEARPRINT PAPER CO. NO. C310 20 DIVISIONS PER INCH BOTH WAYS, 120 BY 180 DIVISIONS. CLEARPRINT CHARTS PRINTED IN U.S.A. ON CLEARPRINT TECH. CL. PAPER NO. 1015

September, 1978
Monthly Morning Average
Upper Air Sounding
Airport Site, Kalispell, Montana
γ_d = dry adiabetic lapse rate



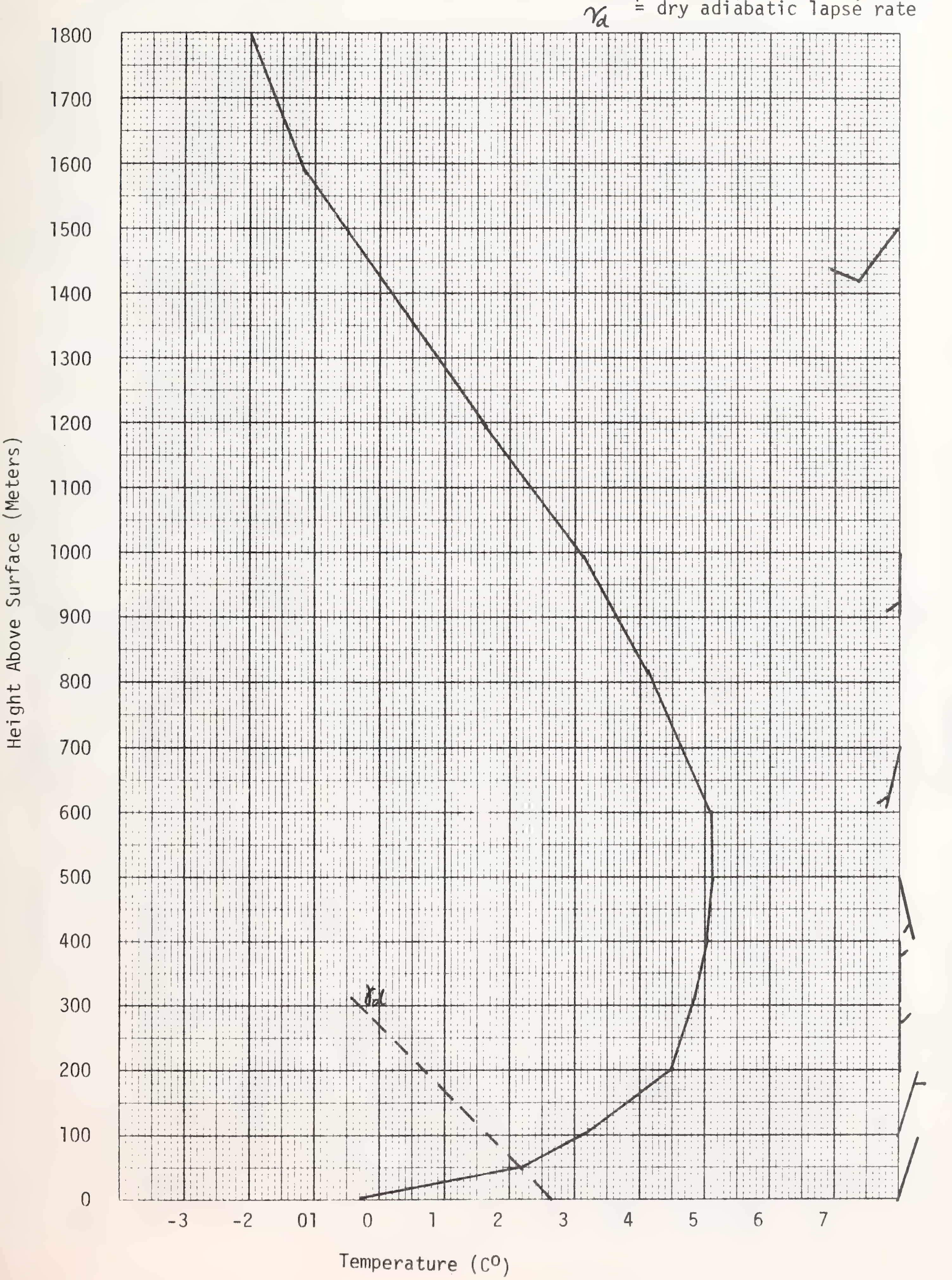
CLEARPRINT PAPER CO NO C310 20 DIVISIONS PER INCH BOTH WAYS 120 BY 180 DIVISIONS
CLEARPRINT CHARTS
PRINTED IN U S A ON CLEARPRINT TECHNICAL PAPER

September 1978
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT



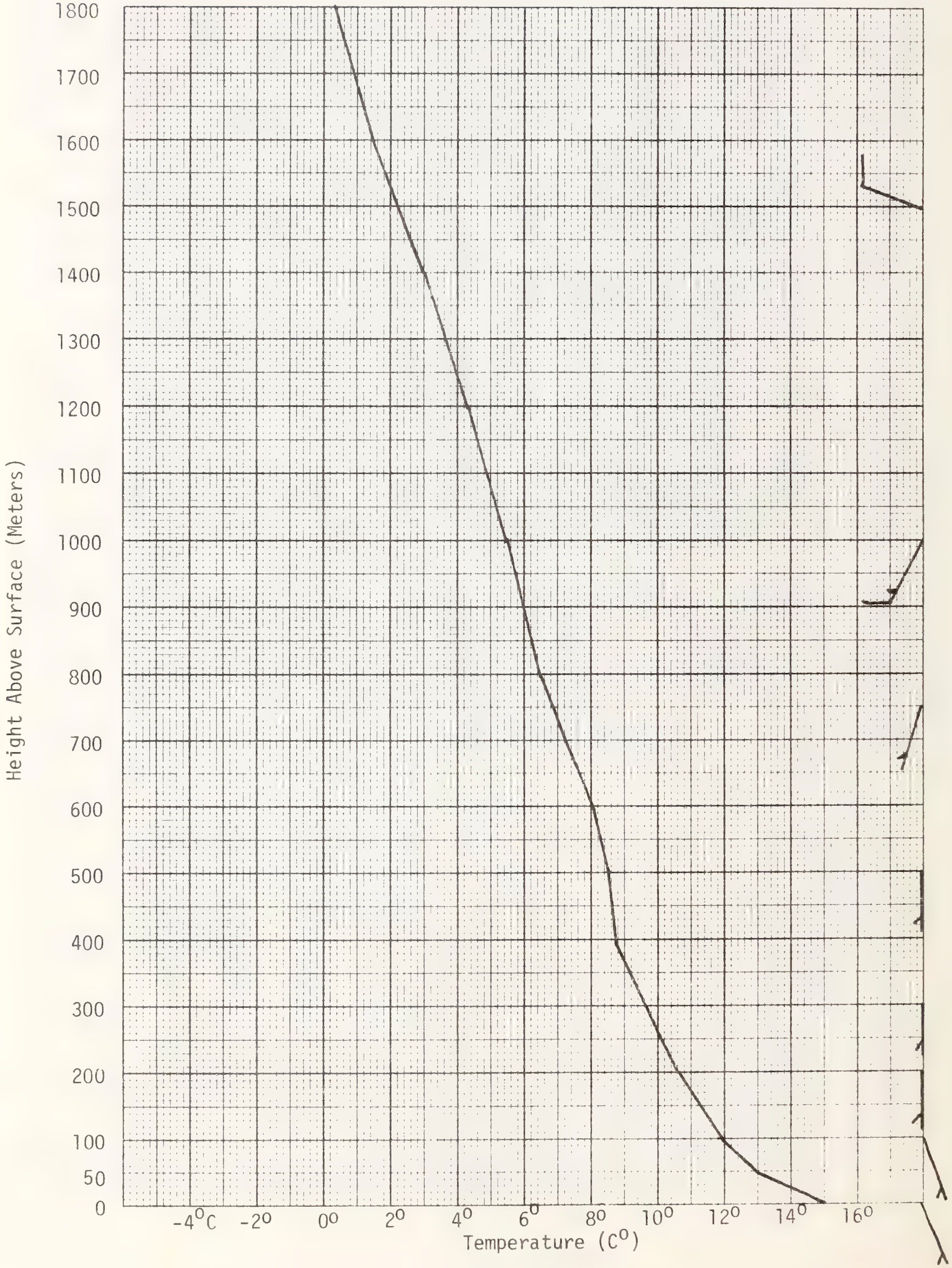
CLEARPRINT PAPER CO NO. C310 20 DIVISIONS PER INCH BOTH WAYS. 120 BY 180 DIVISIONS. CLEARPRINT CHARTS PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER INC

October 1978
Monthly Morning Average
Upper Air Sounding
Airport Site, Kalispell, Montana



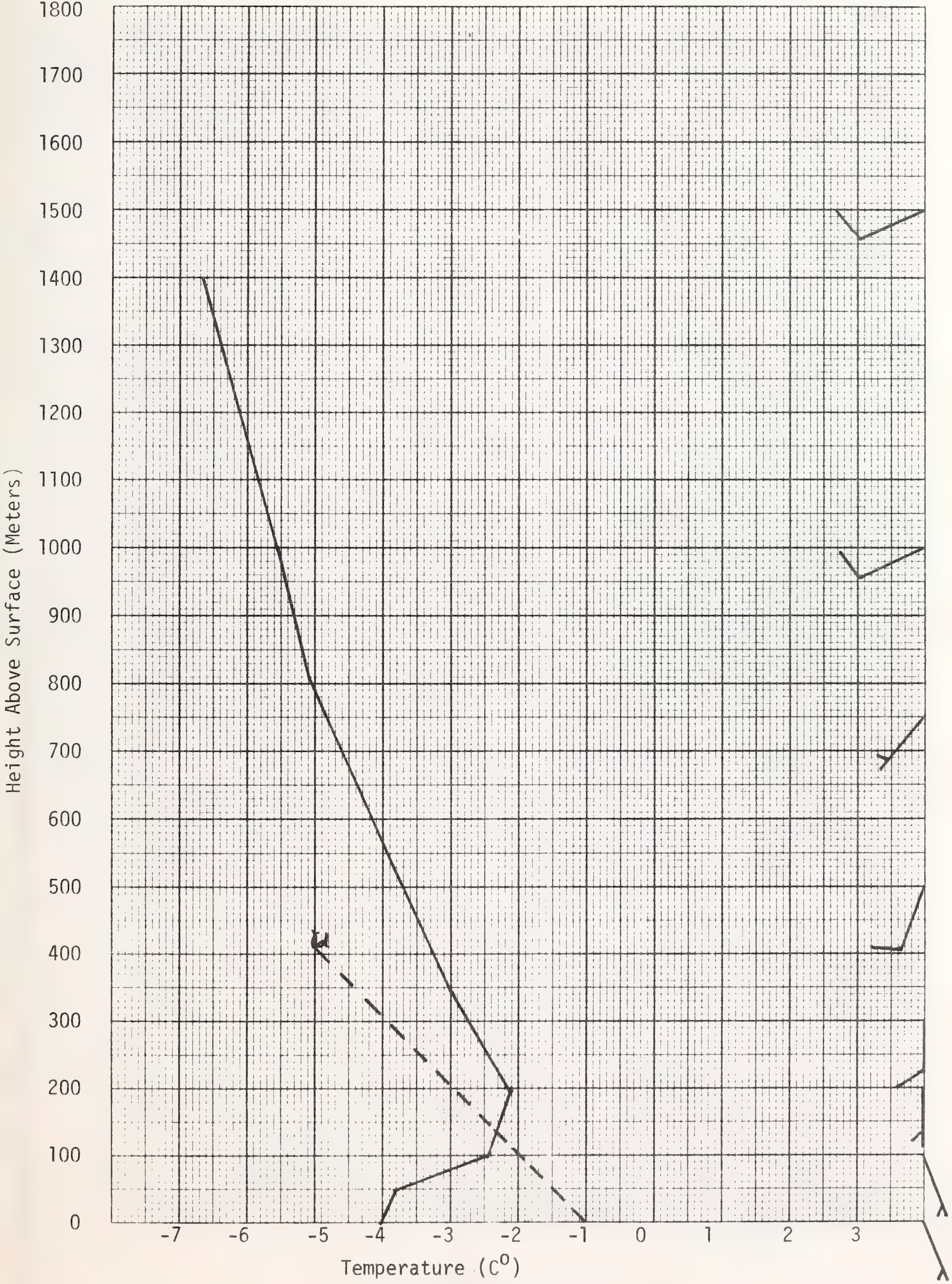
CLEARPRINT PAPER CO NO C310 20 DIVISIONS PER INCH BOTH WAYS 120 BY 160 DIVISIONS
CLEARPRINT CHARTS
PRINTED IN U.S.A.

October 1978
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT



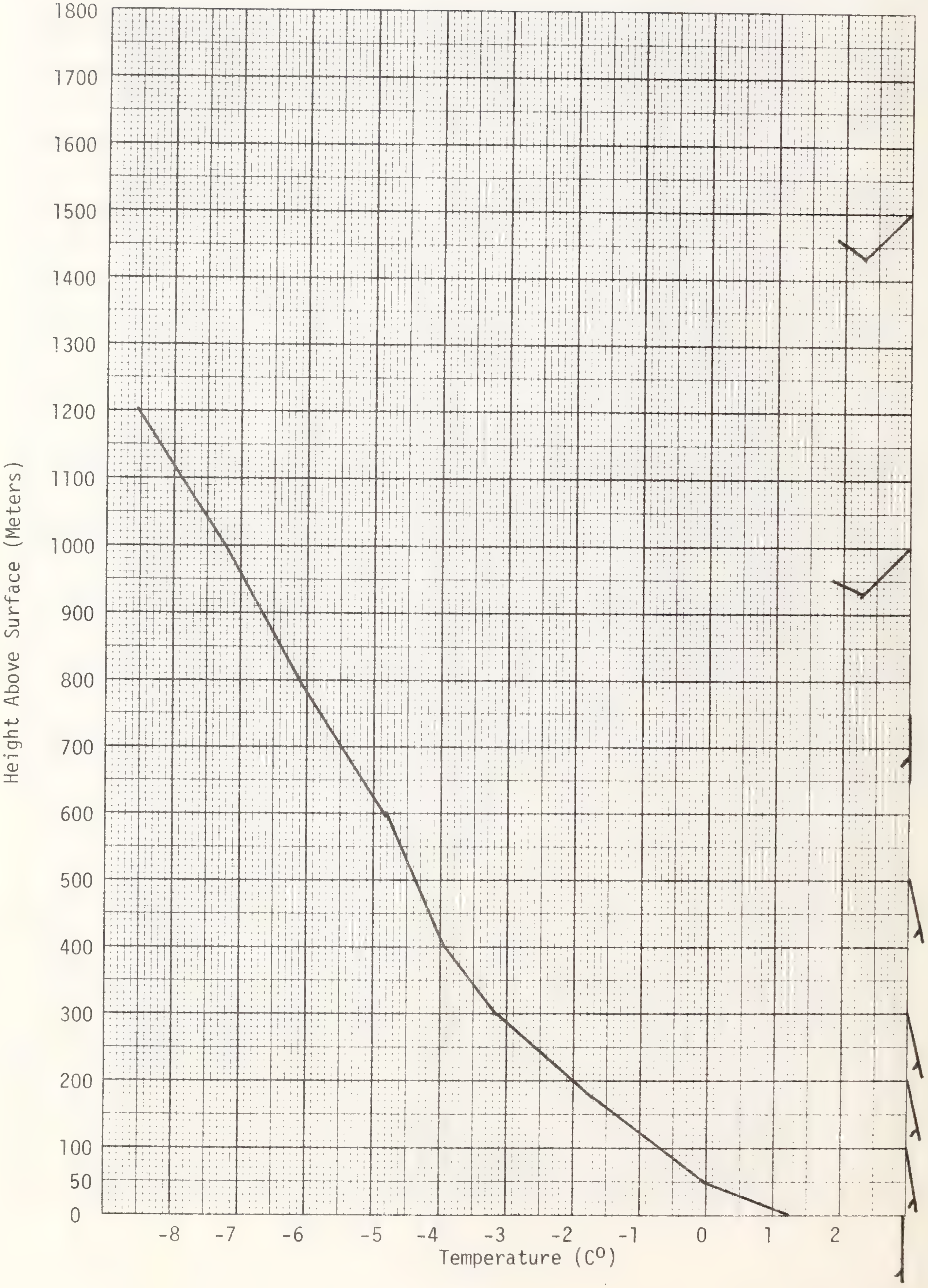
CLEARPRINT PAPER CO. NO. C310 20 DIVISIONS PER INCH BOTH WAYS. 120 BY 180 DIVISIONS. PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER NO.
CLEARPRINT CHARTS

November, 1978
Monthly Morning Average
Upper Air Soundings
Airport Site, Kalispell, Montana
γ_d = dry adiabatic lapse rate



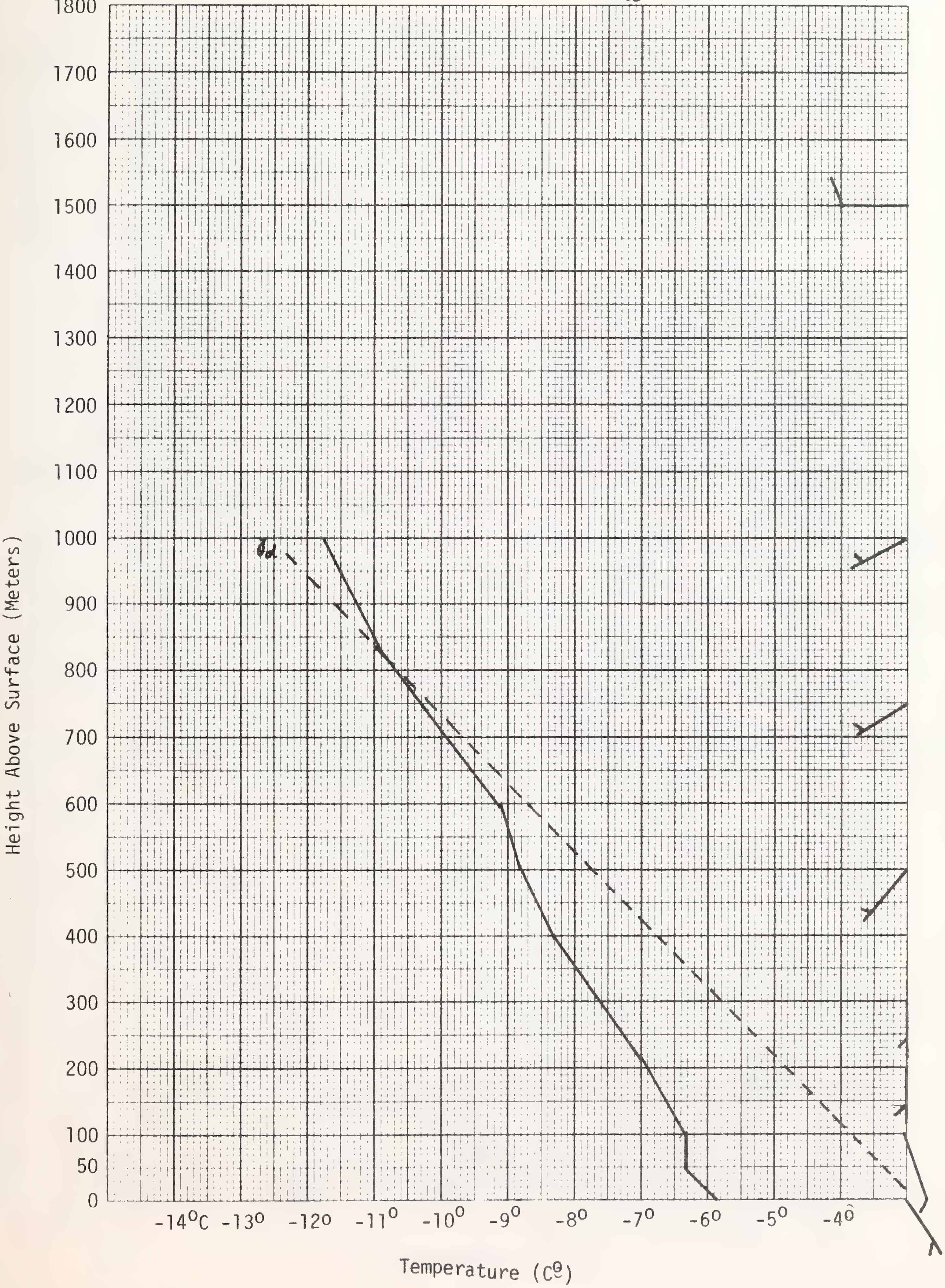
CLEARPRINT PAPER CO NO C310 20 DIVISIONS PER INCH BOTH WAYS 120 BY 180 DIVISIONS CLEARPRINT CHARTS PRINTED IN U.S.A. CLEARPRINT TECHNICAL PAPER NO 1015

November 1978
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT



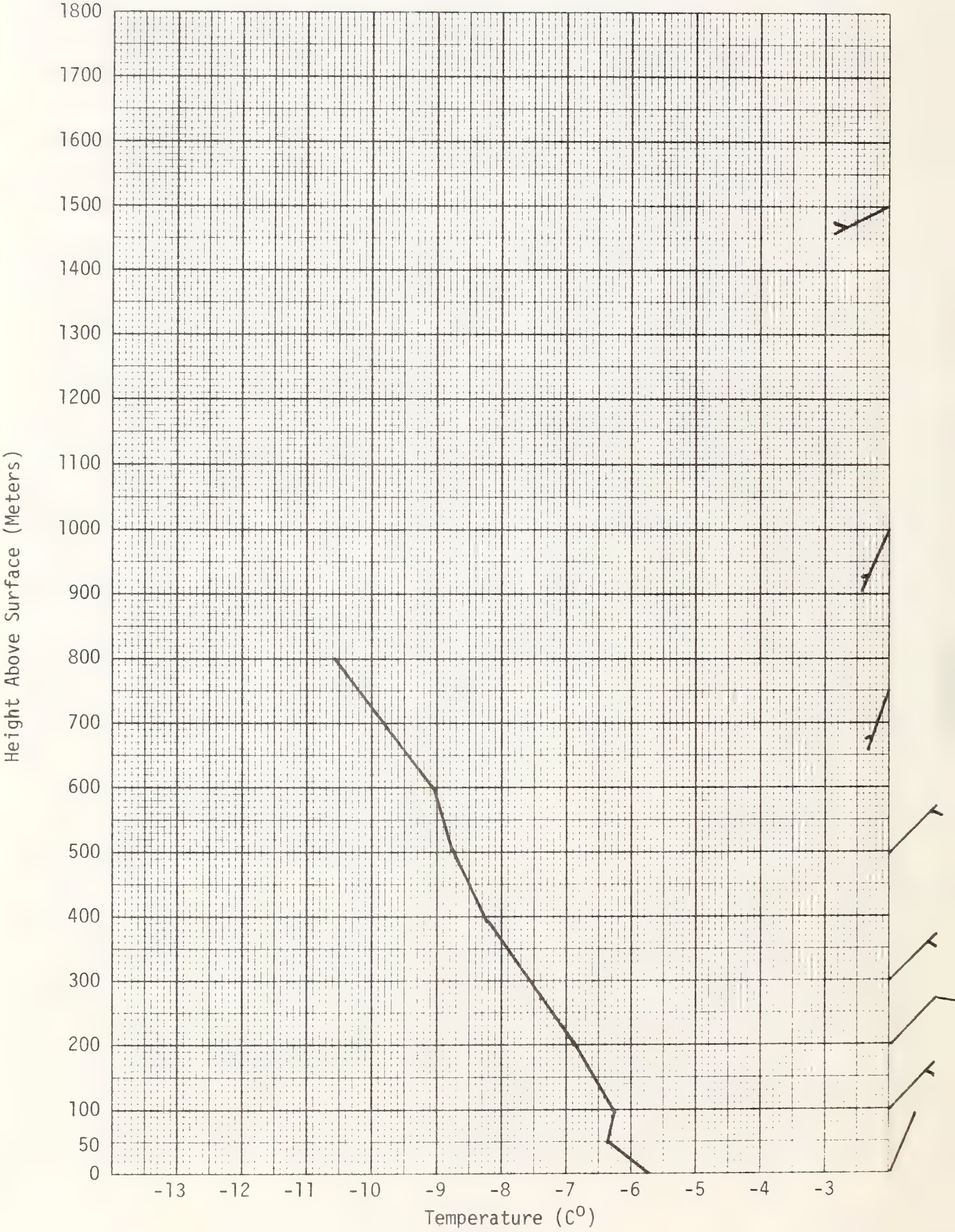
CLEARPRINT PAPER CO NO. C310. 20 DIVISIONS PER INCH BOTH WAYS 120 BY 180 DIVISIONS. CLEARPRINT CHARTS PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER NO. 1015

December 1978
Monthly Morning Average
Upper Air Sounding
Air port Site, Kalispell, MT
γ_d = dry adiabatic lapse rate



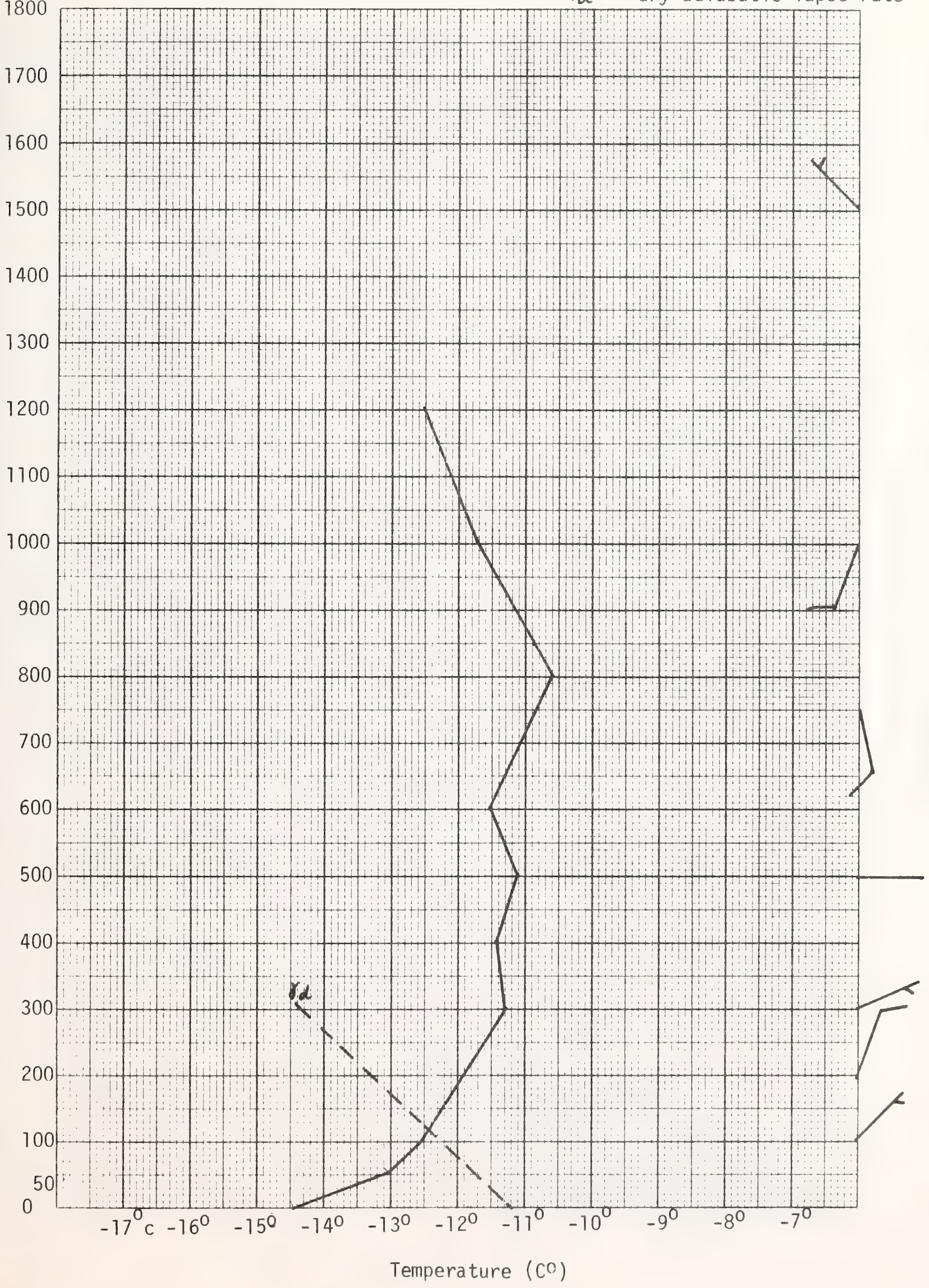
CLEARPRINT PAPER CO. INC. 20 DIVISIONS PER INCH BOTH WAYS 120 BY 160 DIVISIONS
CLEARPRINT CHARTS
PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER NO. 1015

December 1978
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT

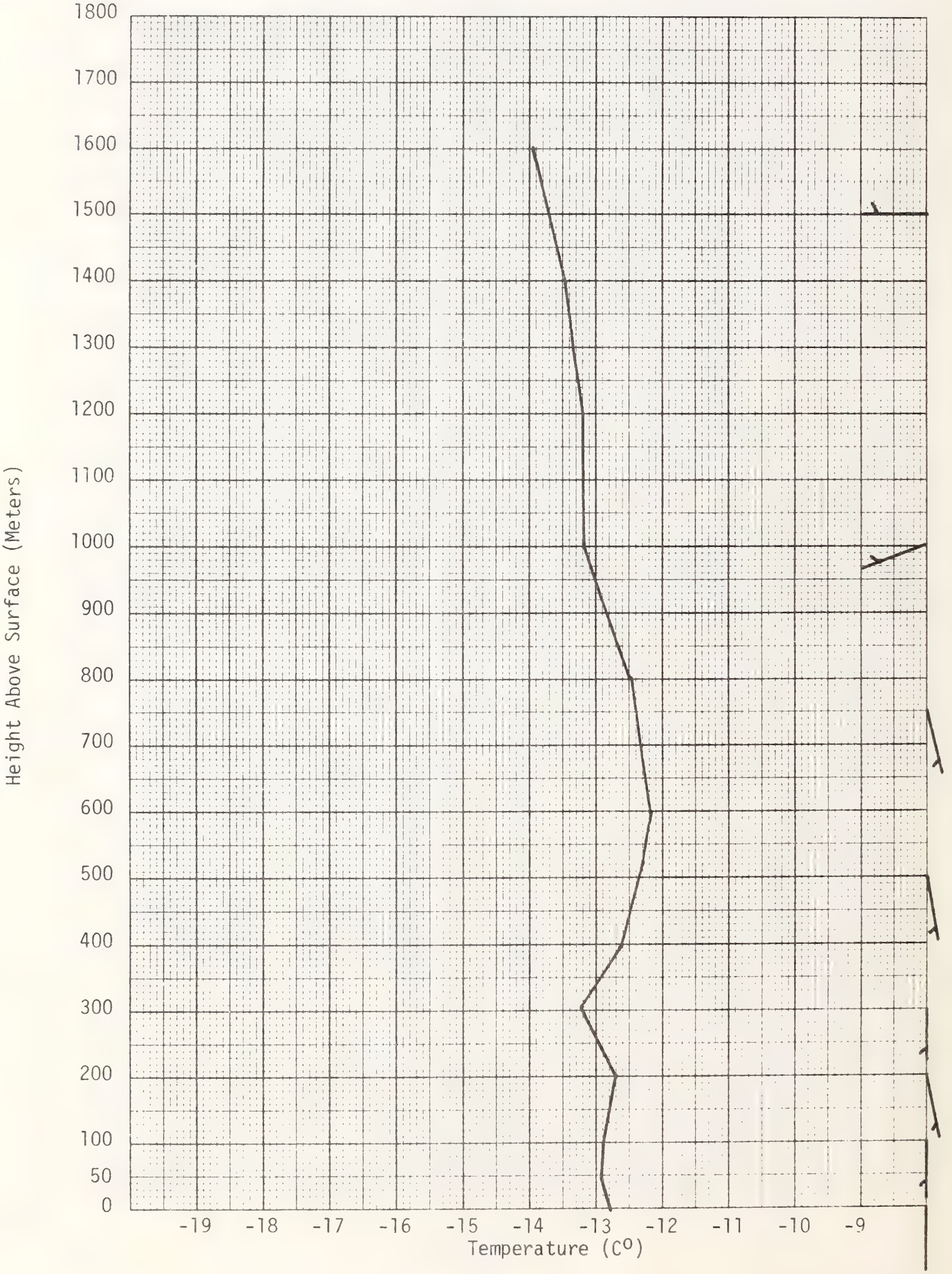


CLEARPRINT PAPER CO. NO. C310. 20 DIVISIONS PER INCH BOTH WAYS 120 BY 180 DIVISIONS. CLEARPRINT CHARTS PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER NO. 1015

January 1979
Monthly Morning Average
Upper Air Sounding
Airport Site, Kalispell, MT
γ_d = dry adiabatic lapse rate



January 1979
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT



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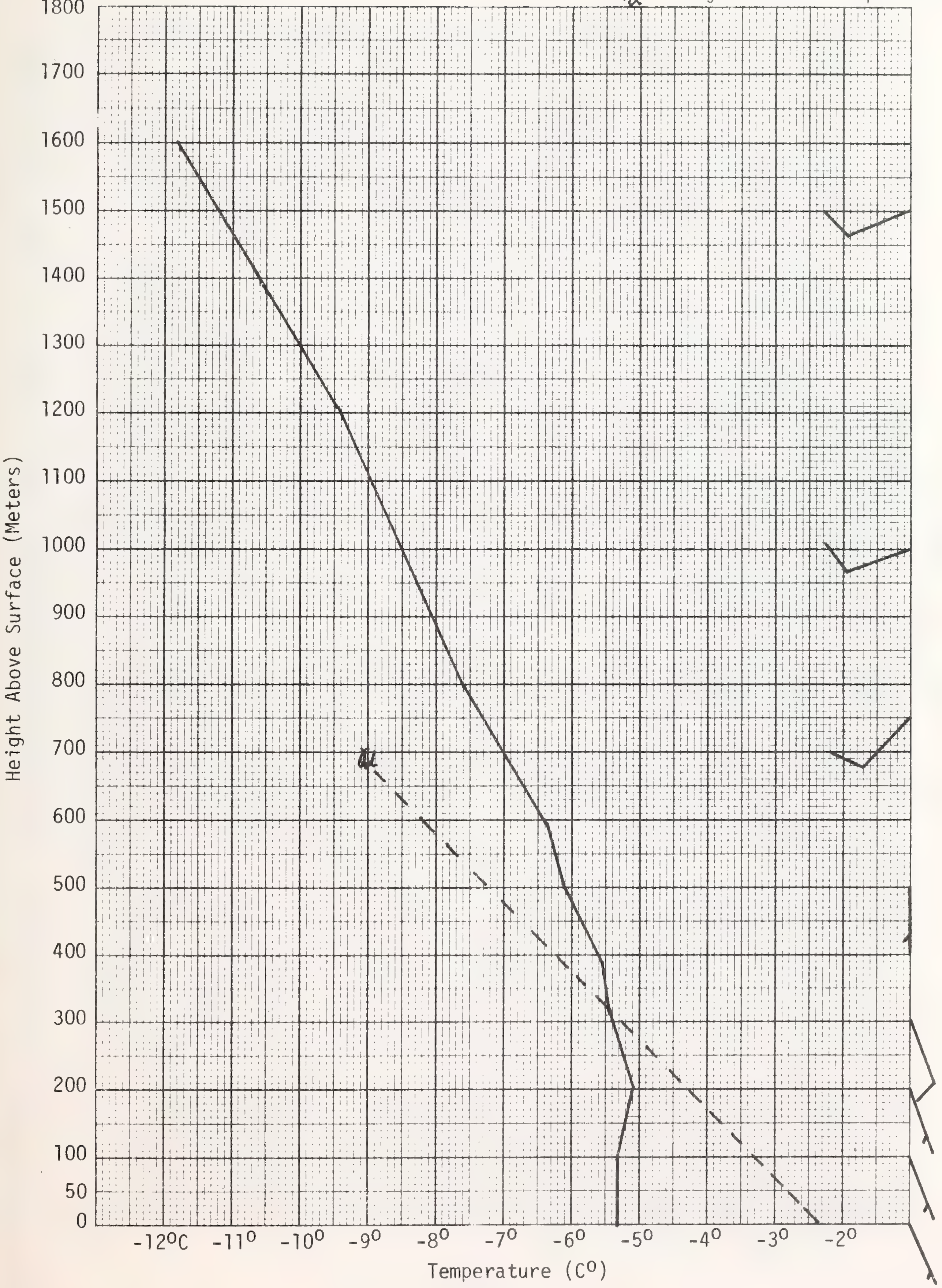
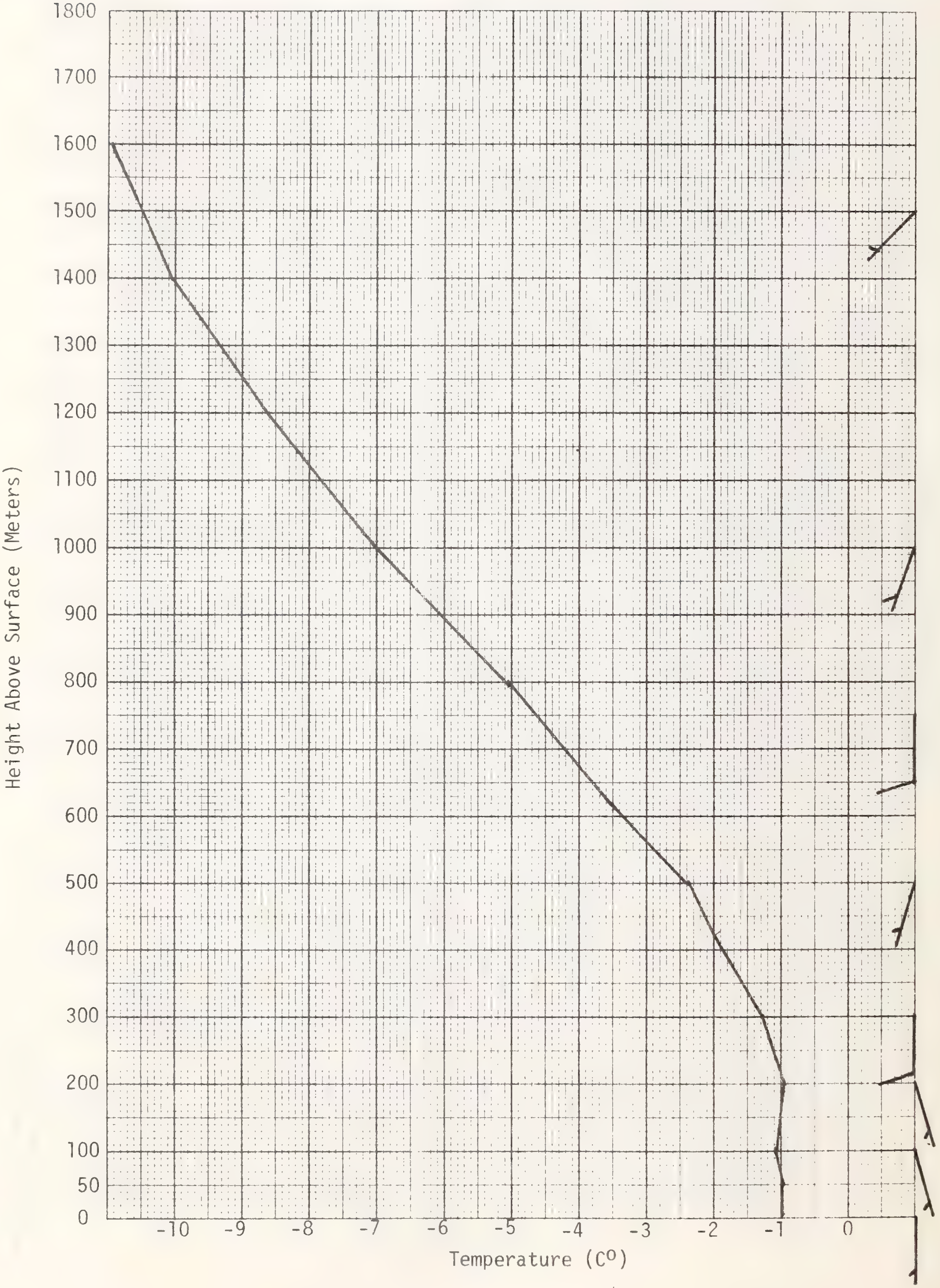
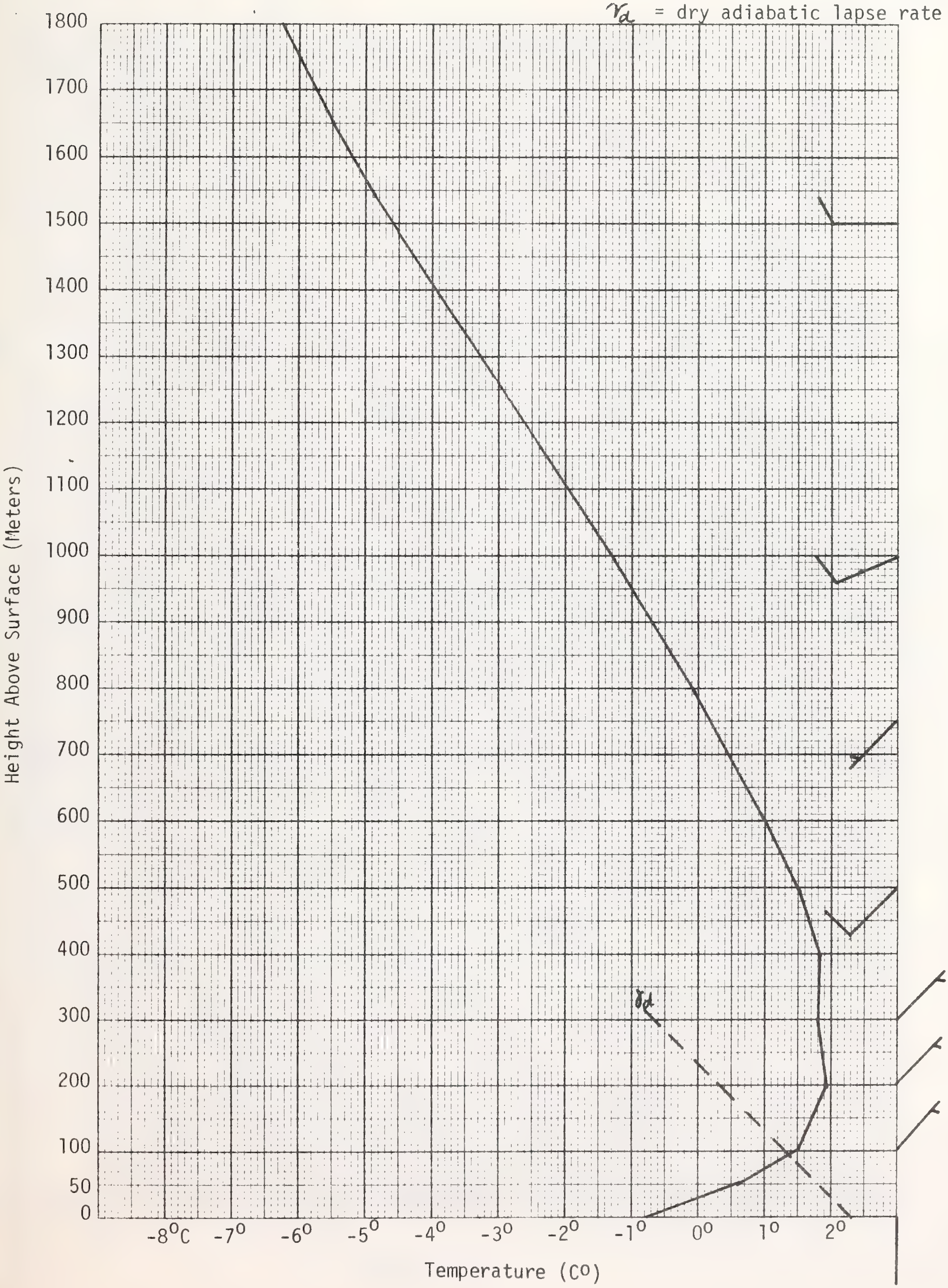
February 1979
Monthly Morning Aserage
Upper Air Sounding
Airport Site, Kalispell, MT
γ_d = dry adiabatic lapse rate



February 1979
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT



CLEARPRINT PAPER CO. NO. C310. 20 DIVISIONS PER INCH BOTH WAYS. 120 BY 180 DIVISIONS. CLEARPRINT CHARTS PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER NO. 1015


March 1979
Monthly Morning Average
Upper Air Sounding
Airport Site, Kalispell, MT
γ_d = dry adiabatic lapse rate

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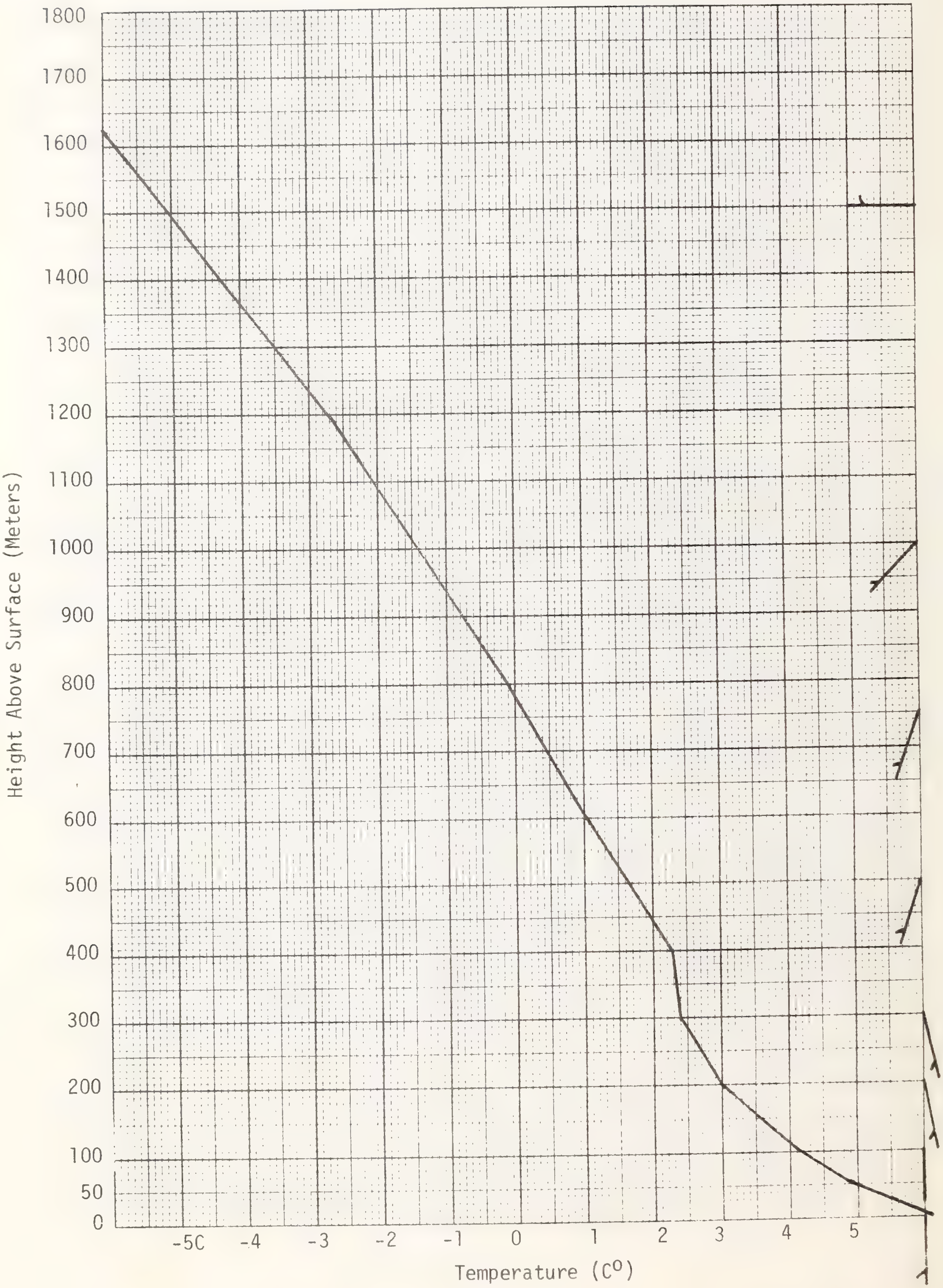
March 1979
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT



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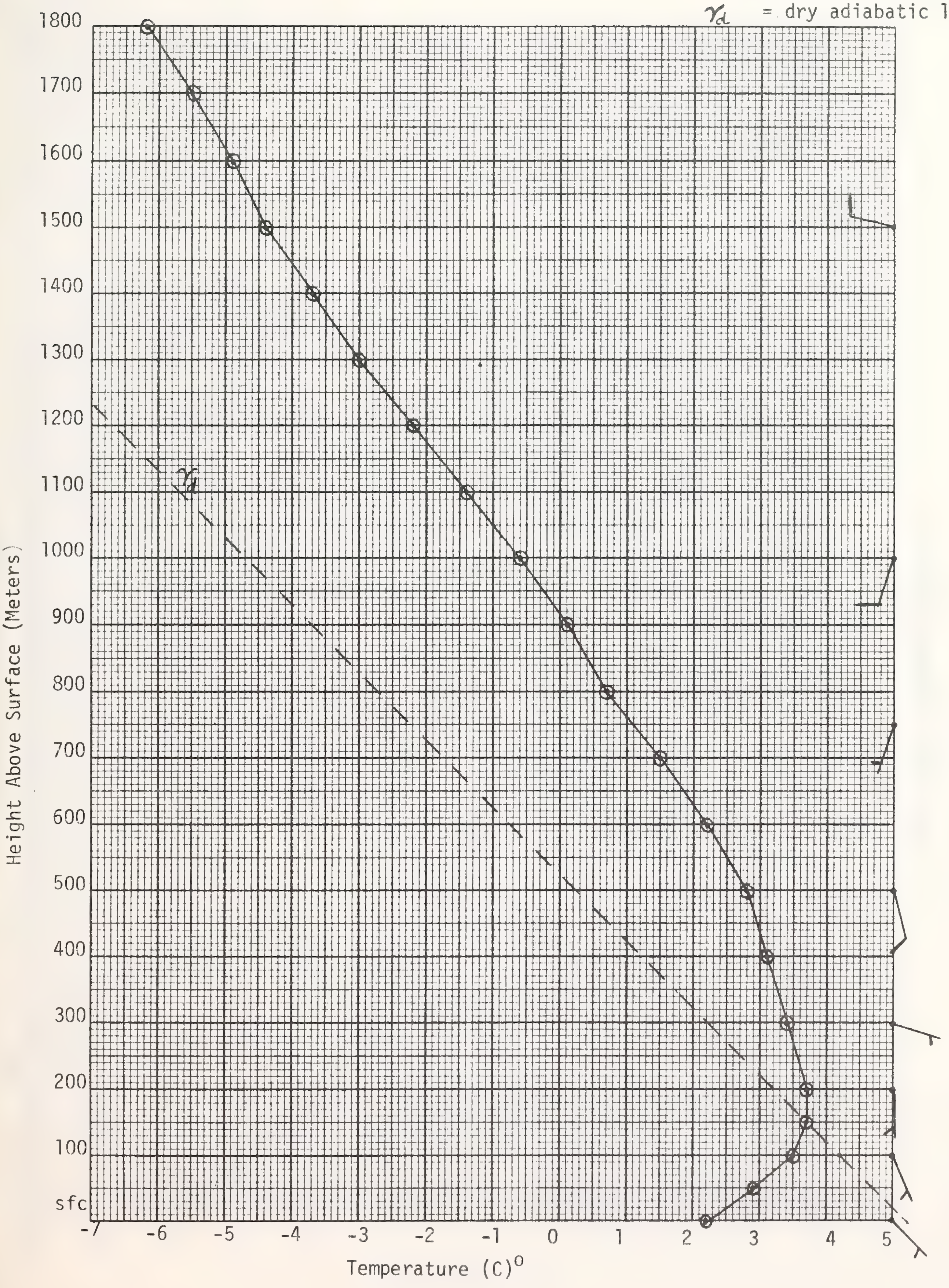
April, 1979
Morning Monthly Average
Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



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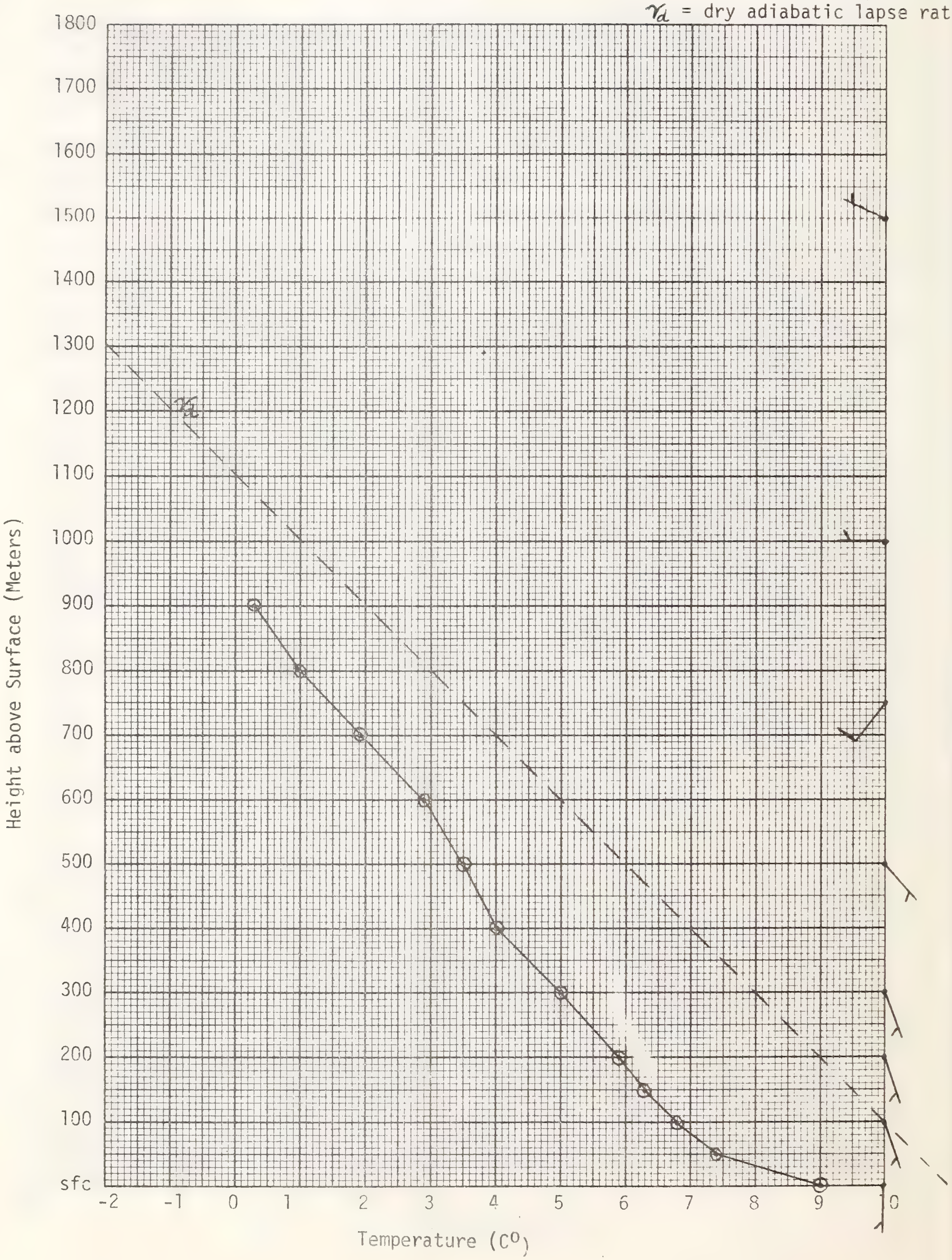
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT
γ_d = dry adiabatic lapse rate



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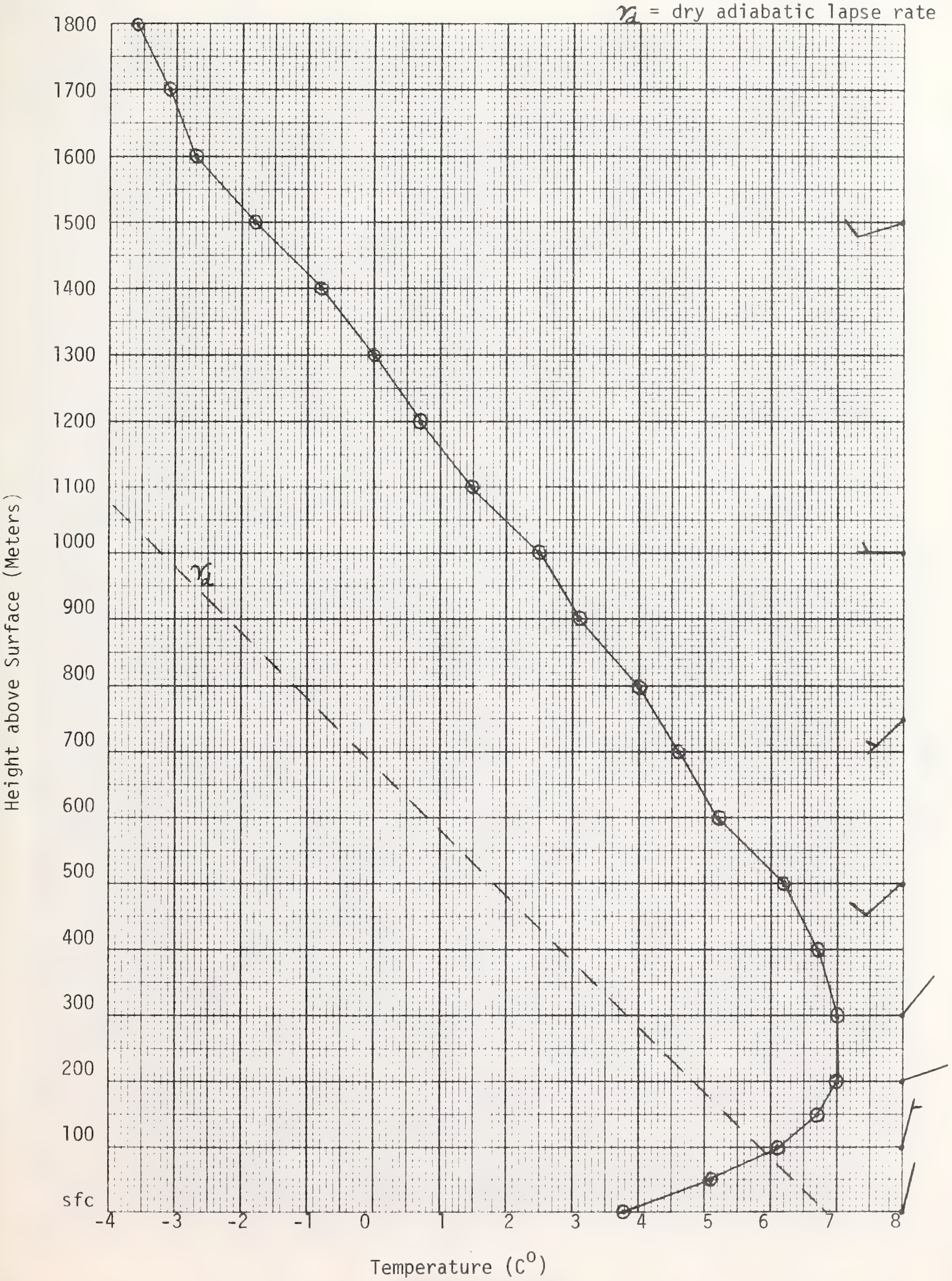
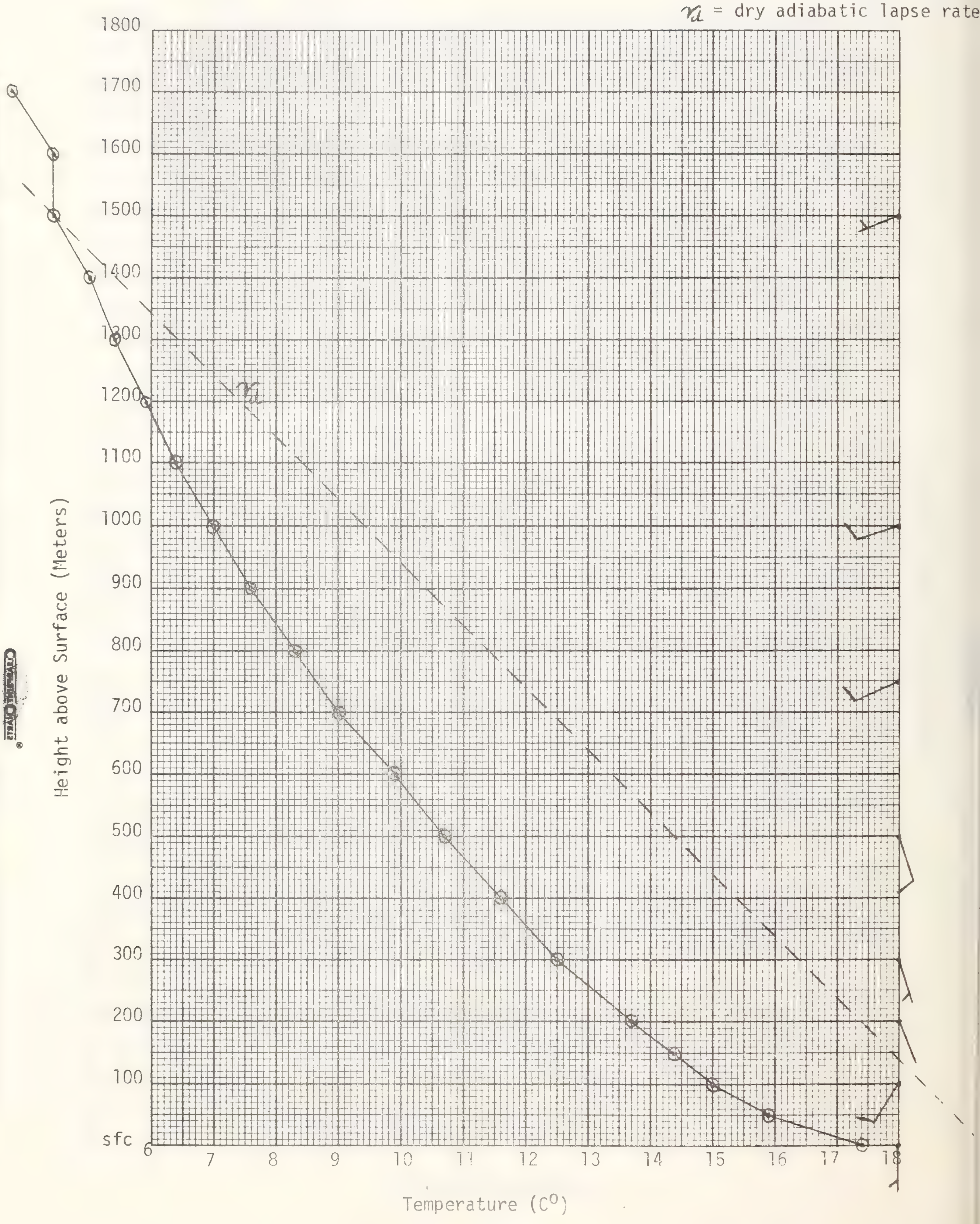
May 1979
Morning Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT
γ_d = dry adiabatic lapse rate



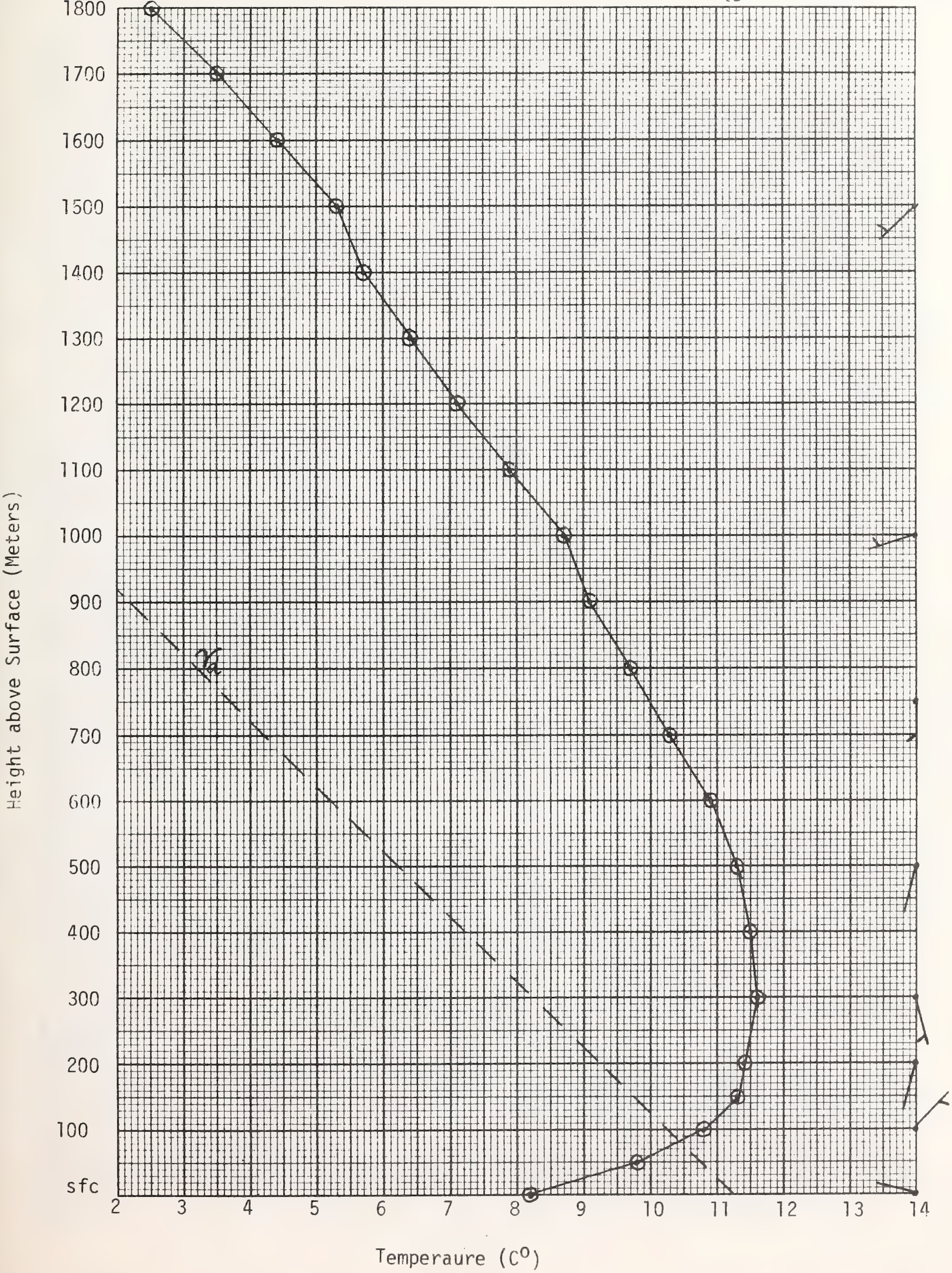
CLEARPRINT PAPER CO NO. C310 20 DIVISIONS PER INCH BOTH WAYS 120 BY 180 DIVISIONS
CLEARPRINT CHARTS
PRINTED IN U.S.A.

May 1979
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell, MT
γ_d = dry adiabatic lapse rate

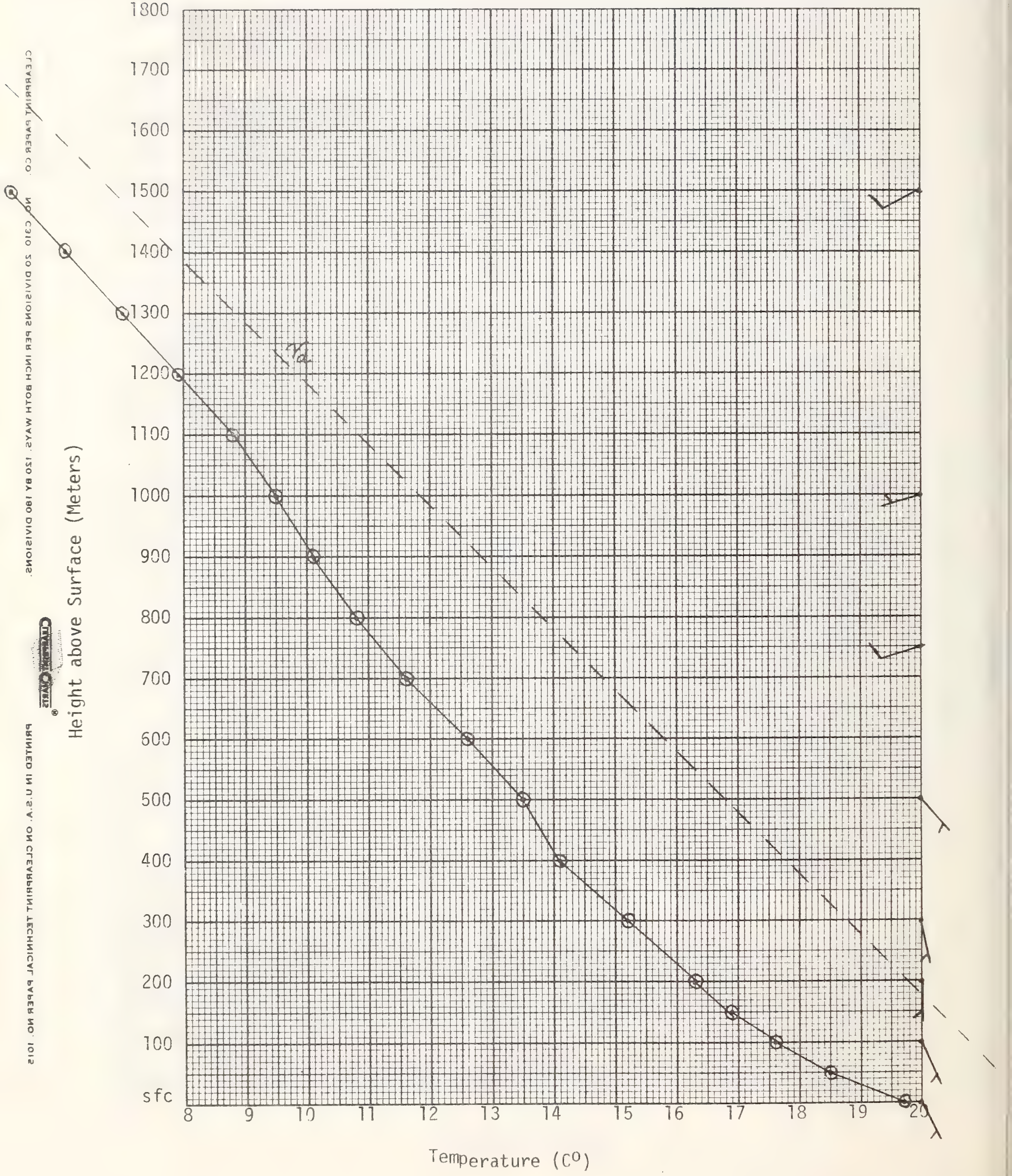


CLEARPRINT PAPER CO. NO. C310 20 DIVISIONS PER INCH BOTH WAYS. 120 BY 180 DIVISIONS.
PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER NO 1015

June 1979
Morning Monthly Average
Upper Air Sounding
Airport Site, Kalispell
γ_d =dry adiabatic lapse rate



June 1979
Afternoon Monthly Average
Upper Air Sounding
Airport Site, Kalispell
γ_d =dry adiabatic lapse rate



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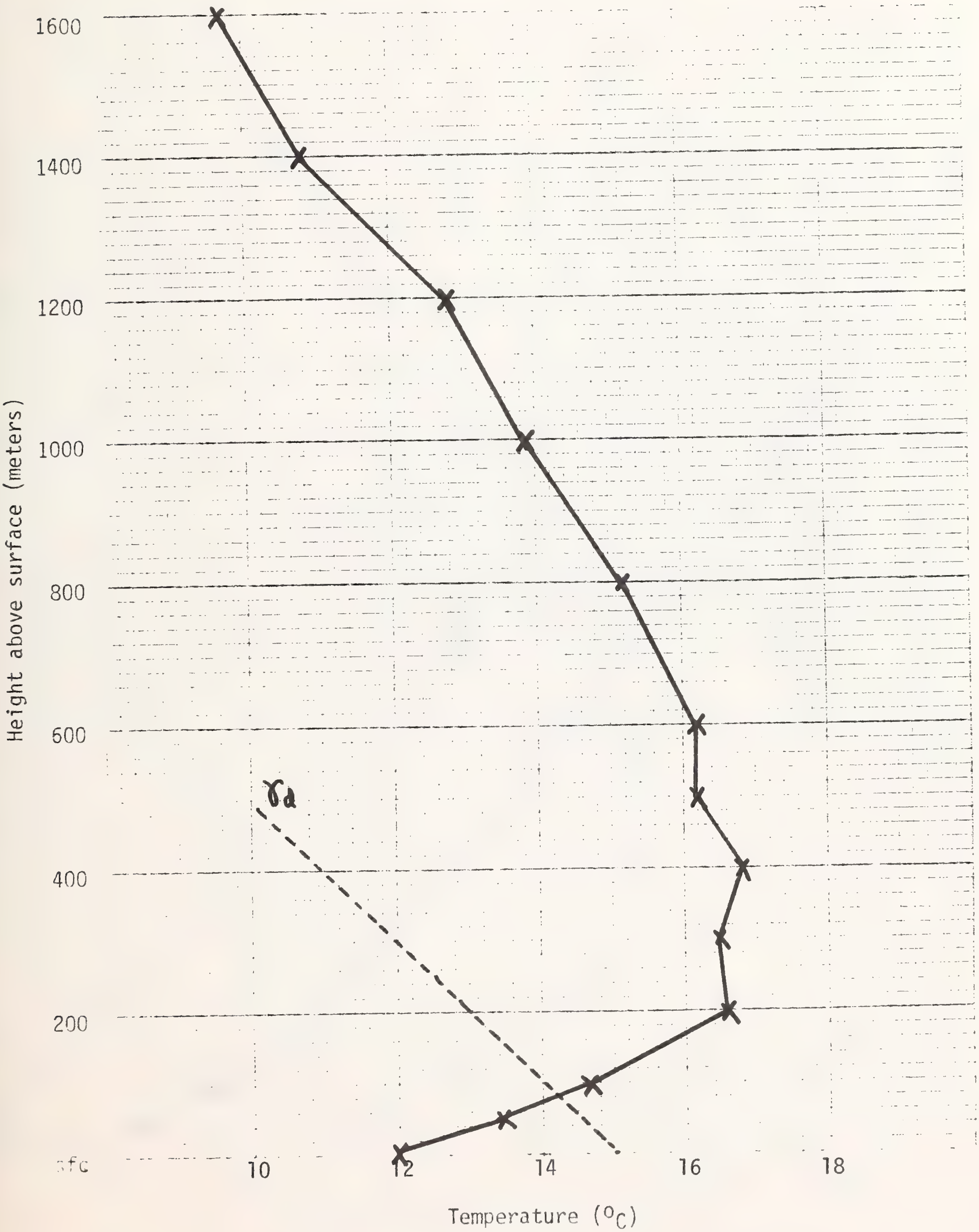
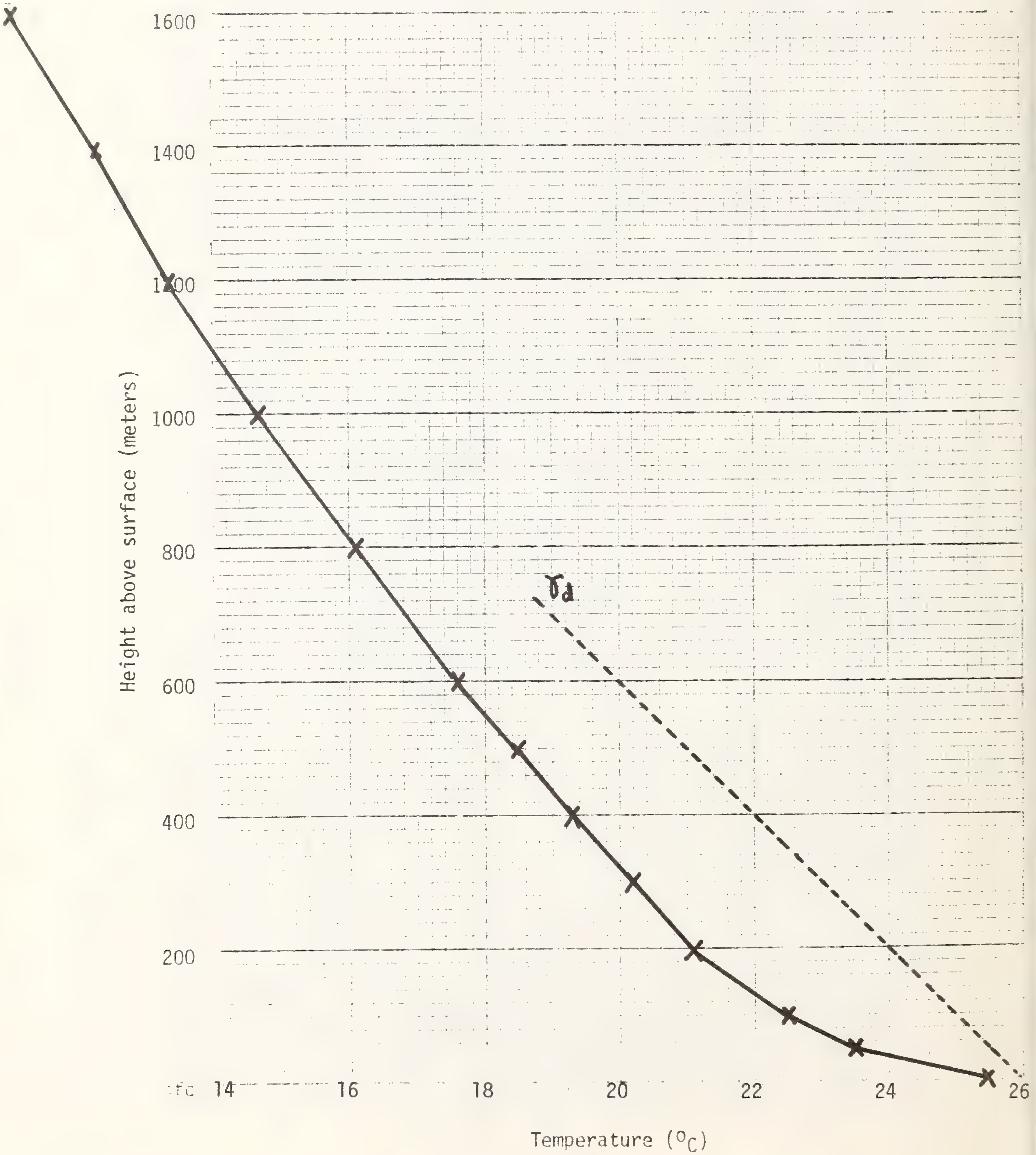
CLEARPRINT CHARTS ®
PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER NO. 1015

July, 1979 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate

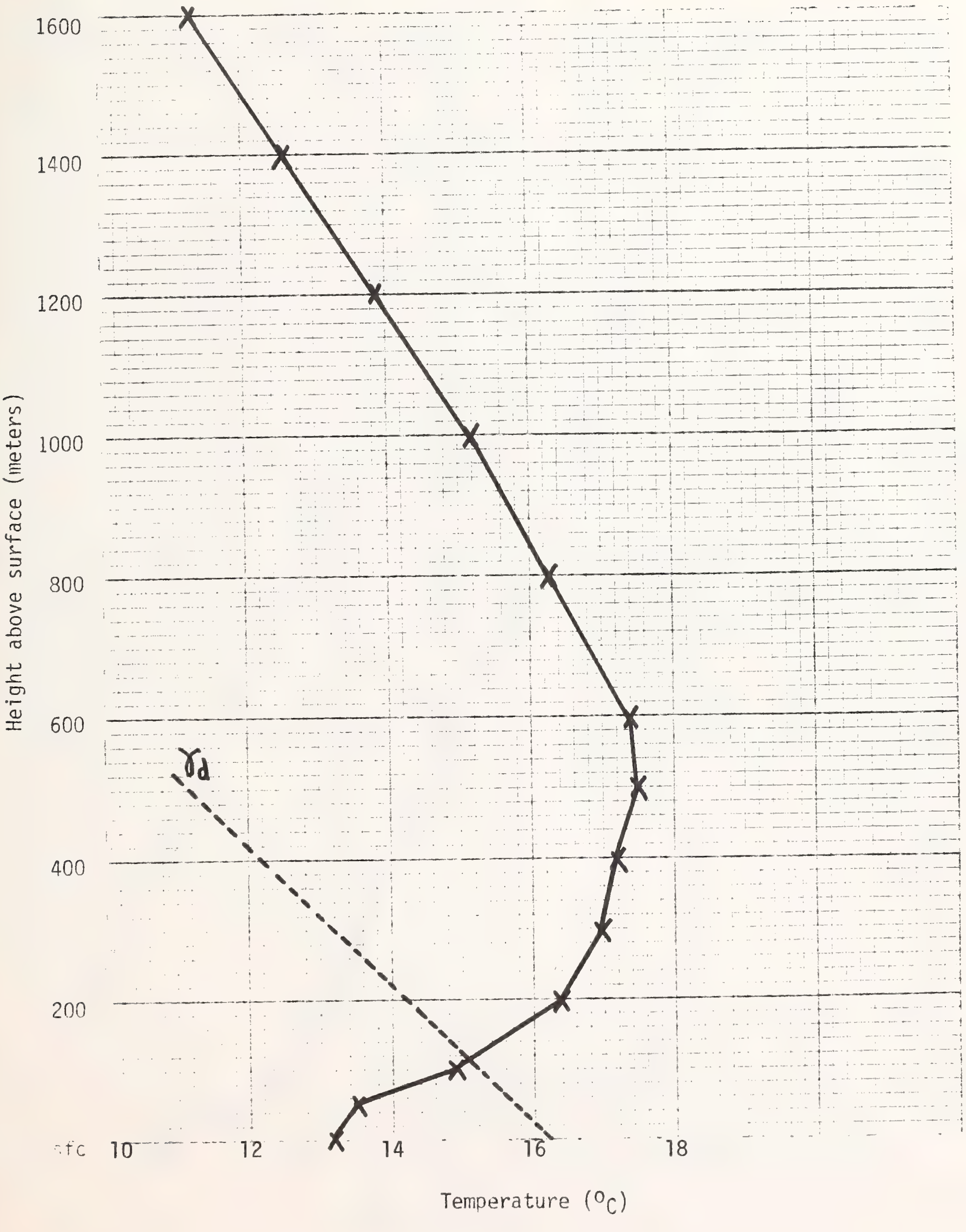


July, 1979 - Afternoon

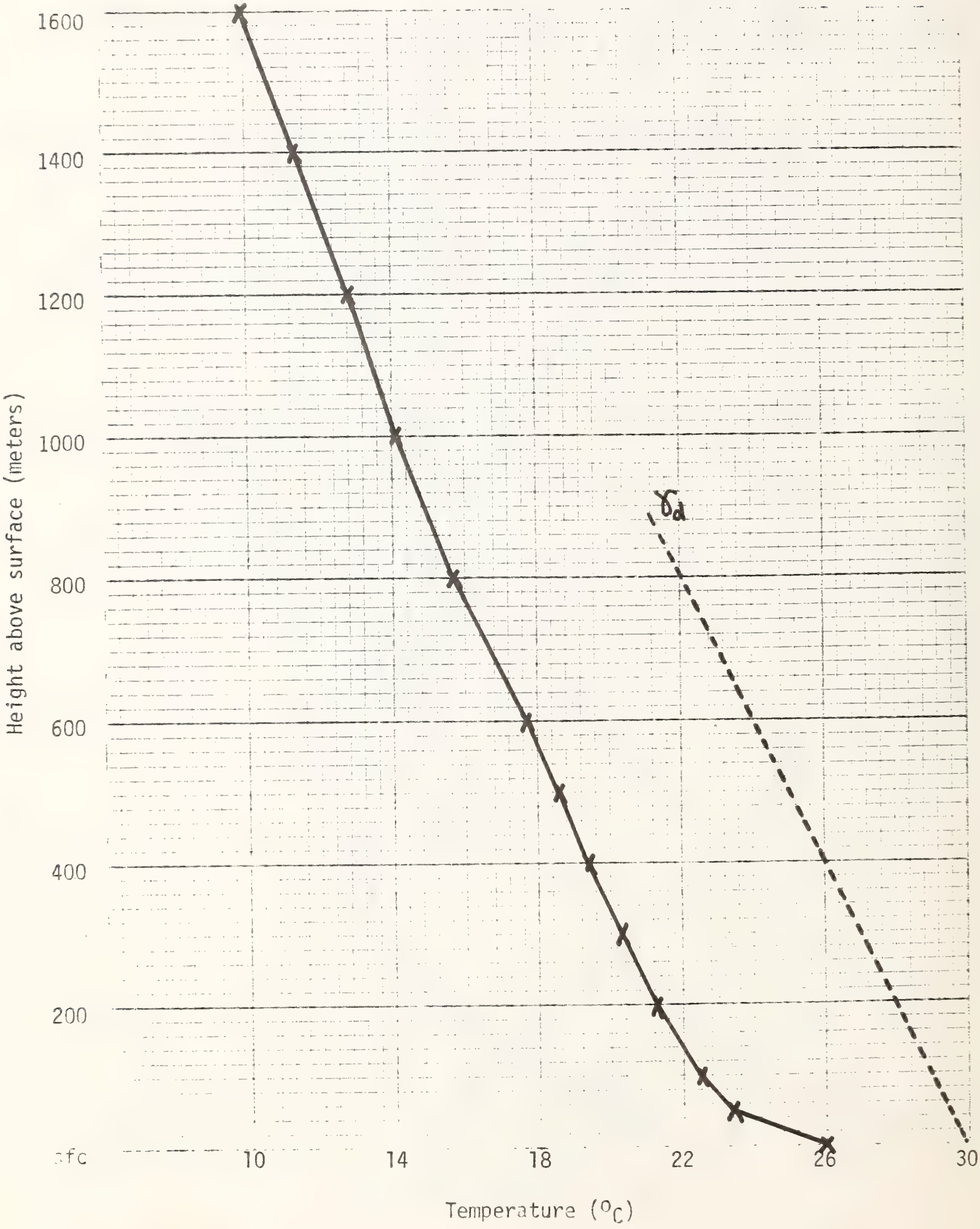
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



August, 1979 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate

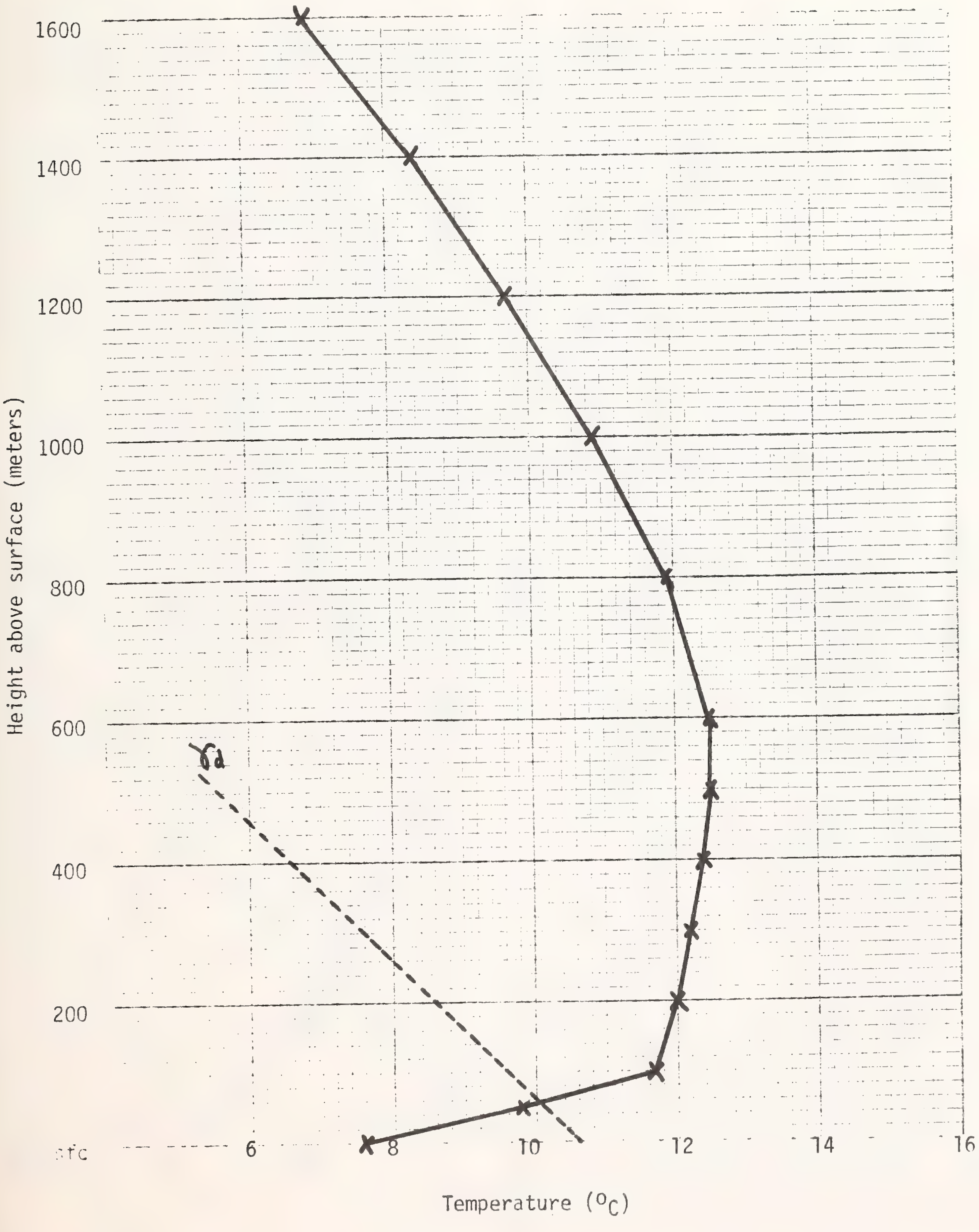


August, 1979 - Afternoon
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate

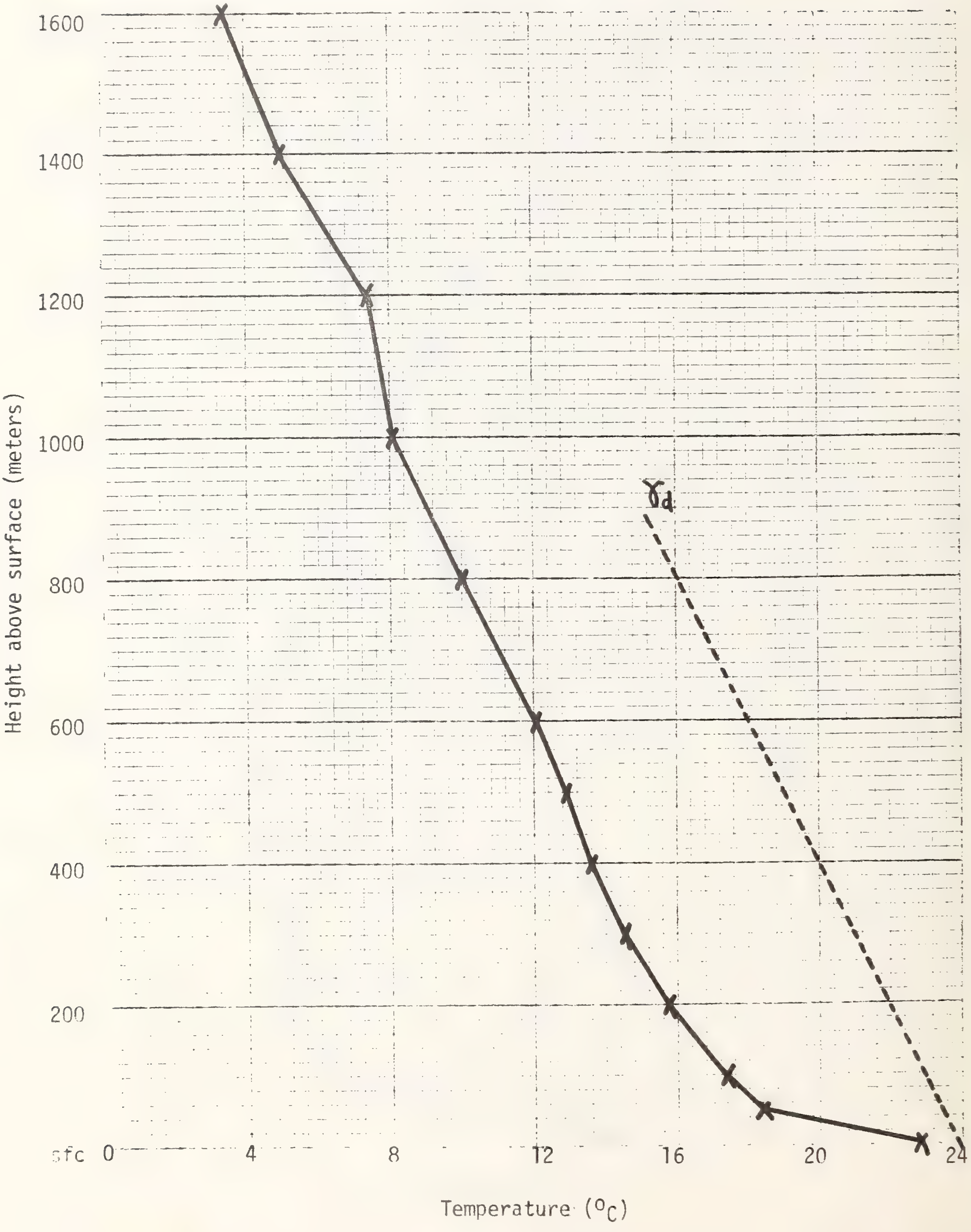


September, 1979 - Morning

Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



September, 1979 - Afternoon
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



October, 1979 - Morning
Average Monthly Upper Air Sounding
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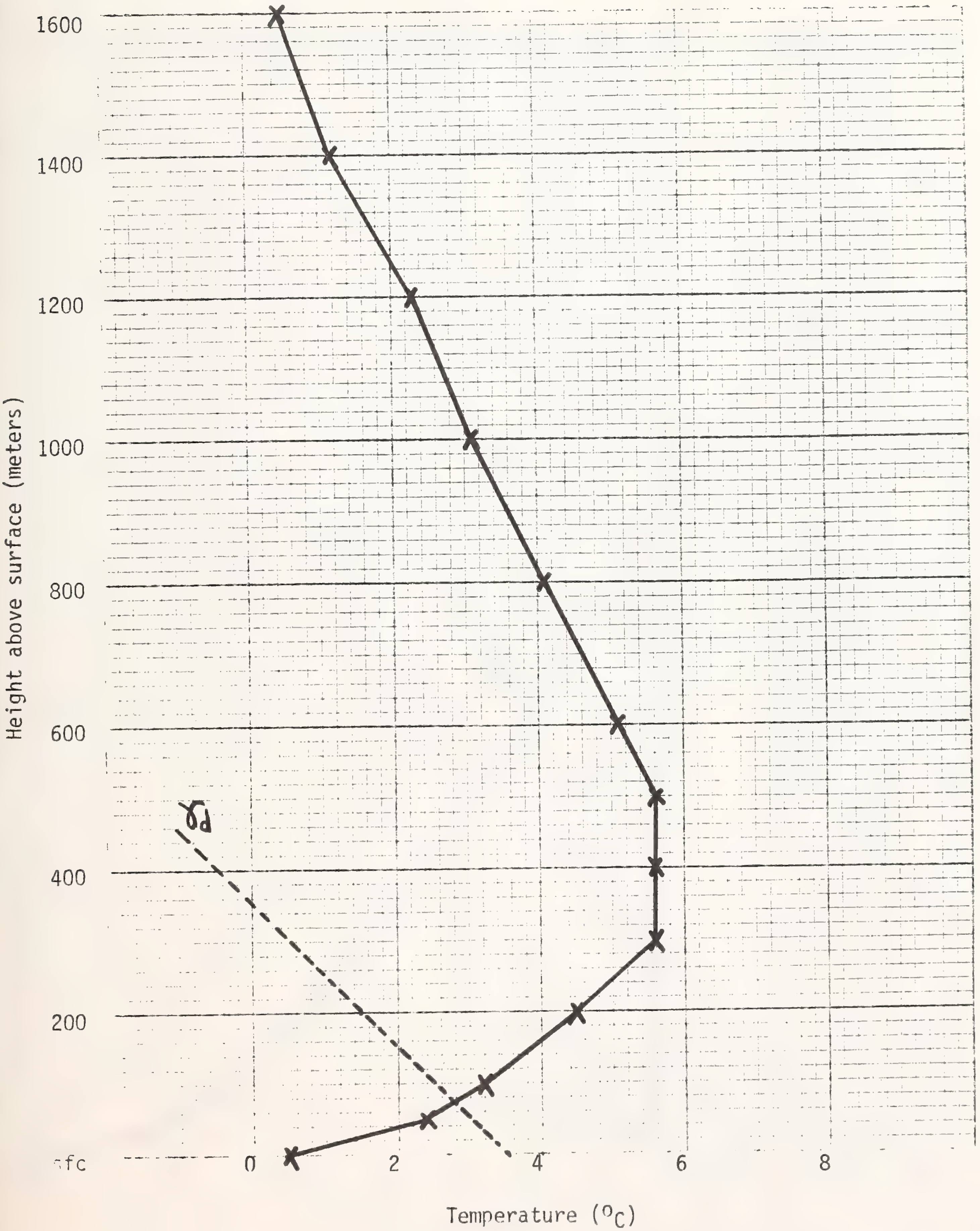
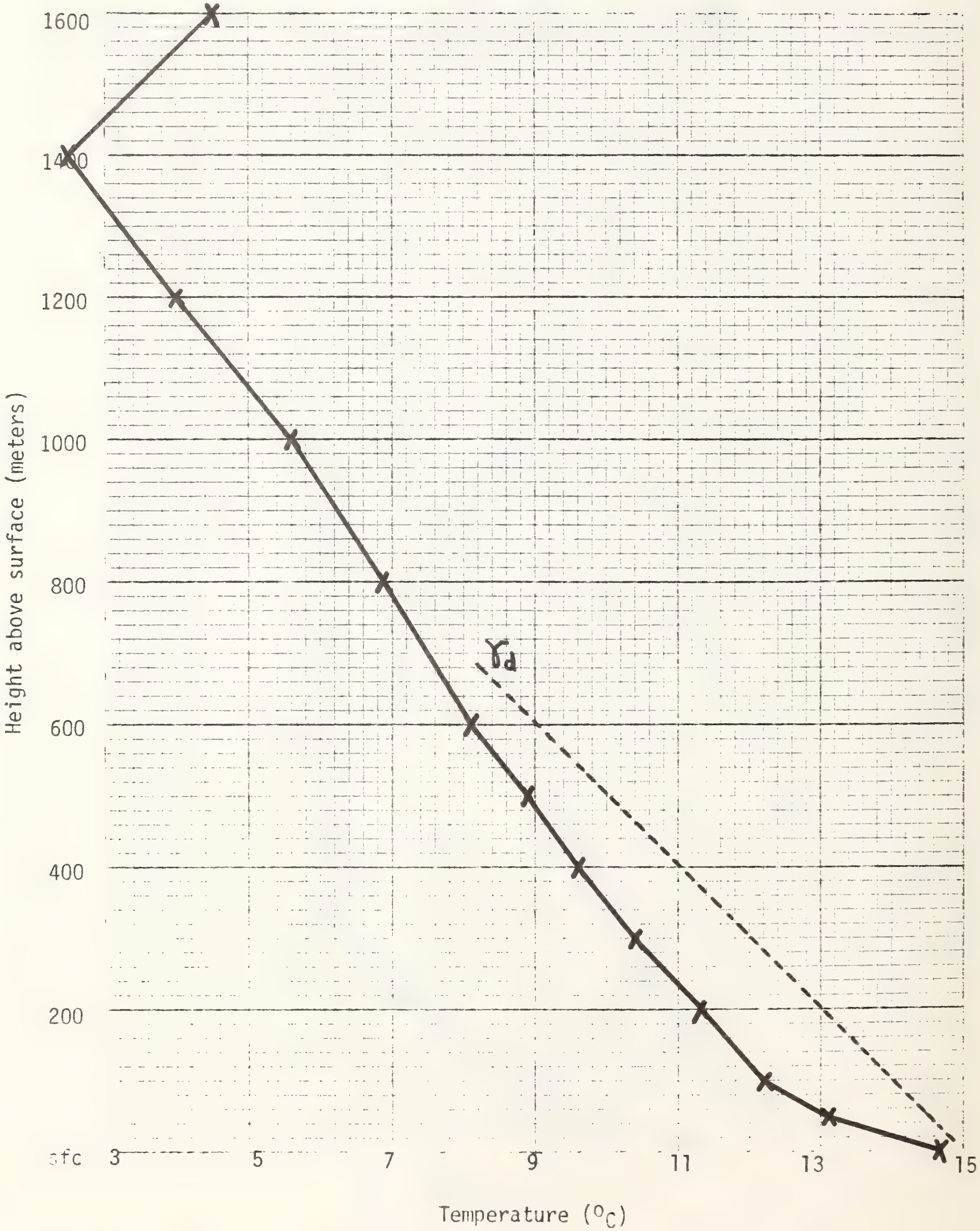


October, 1979 - Afternoon
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



November, 1979 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
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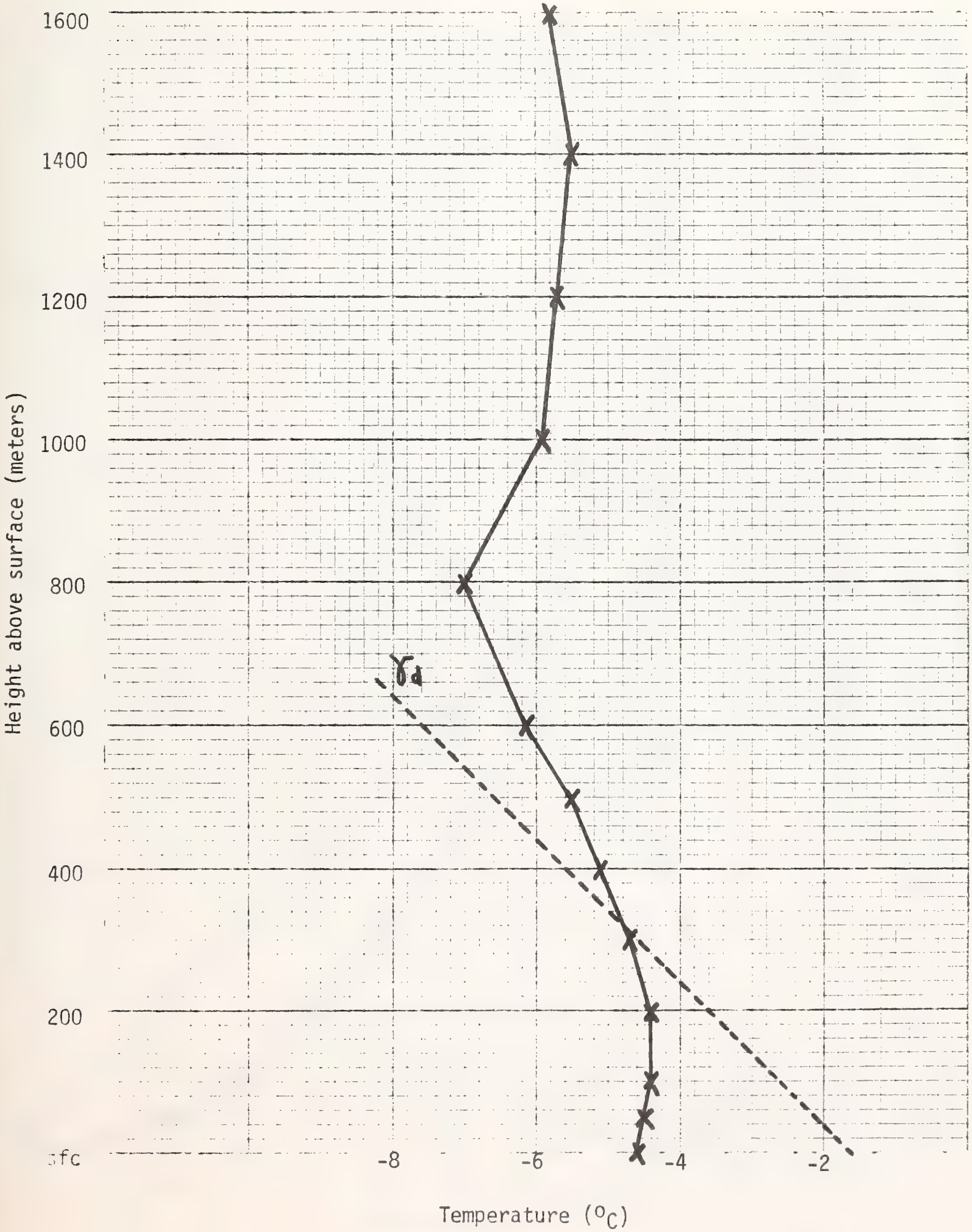

November, 1979 - Afternoon
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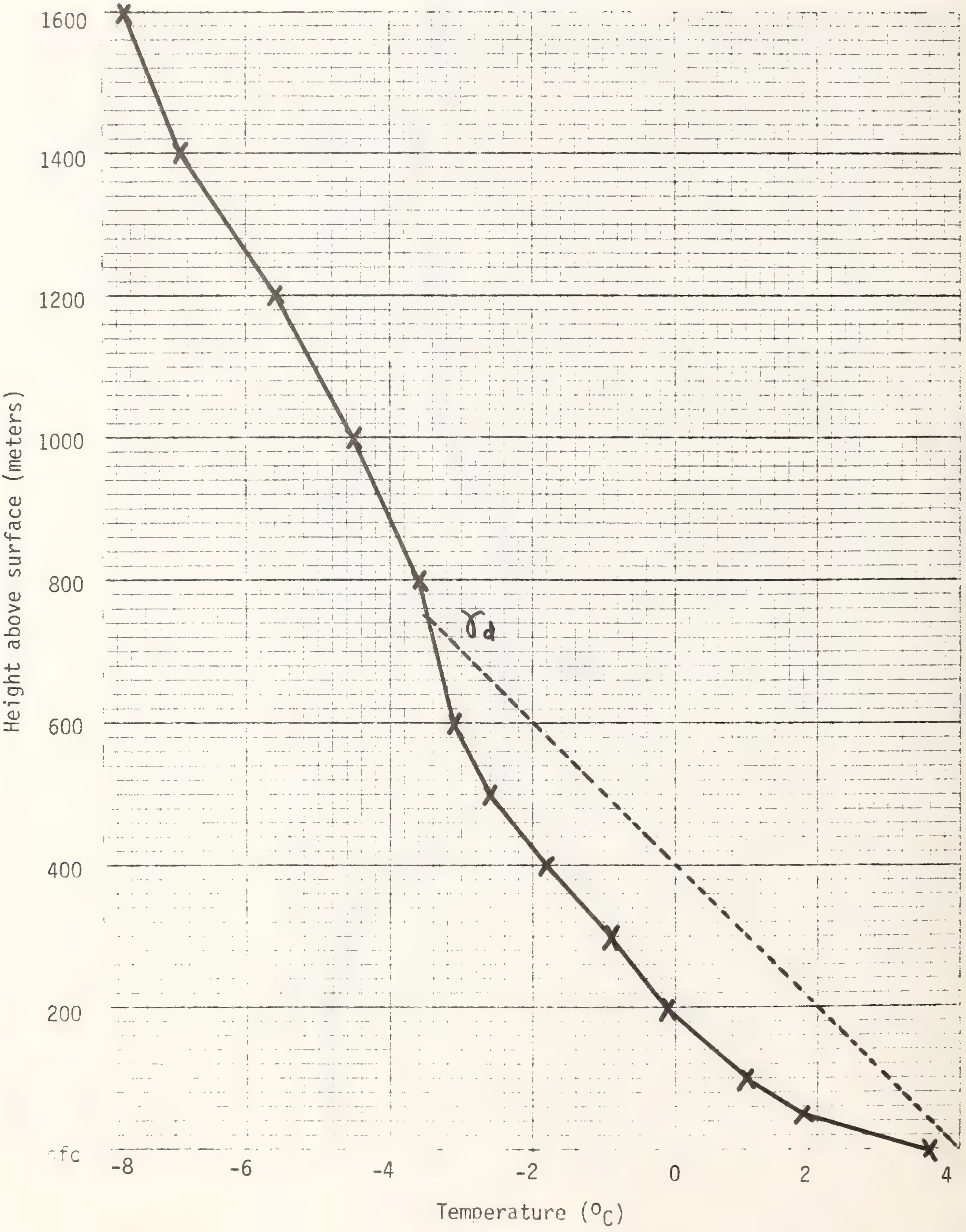
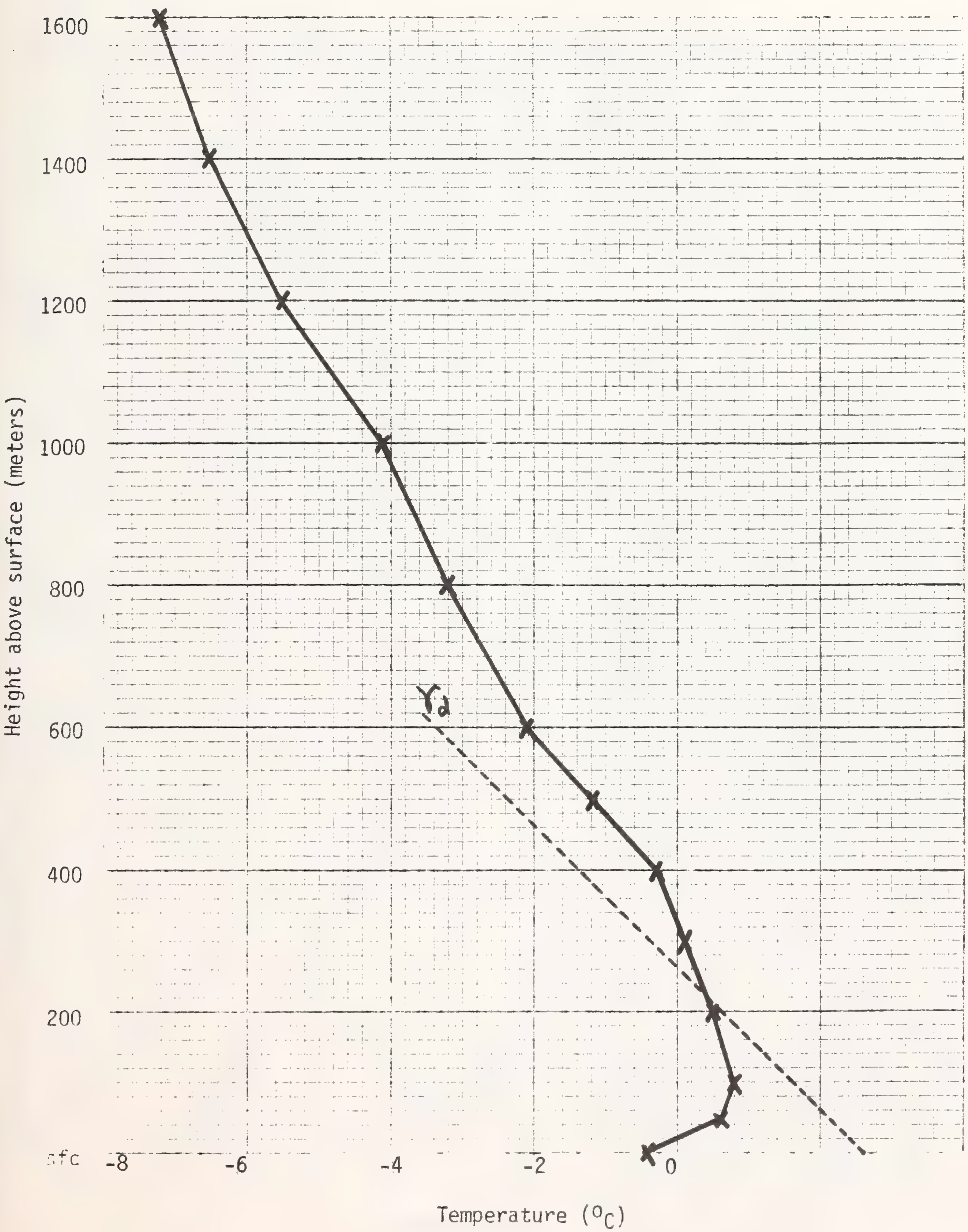
γ_d = dry adiabatic lapse rate



December, 1979 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



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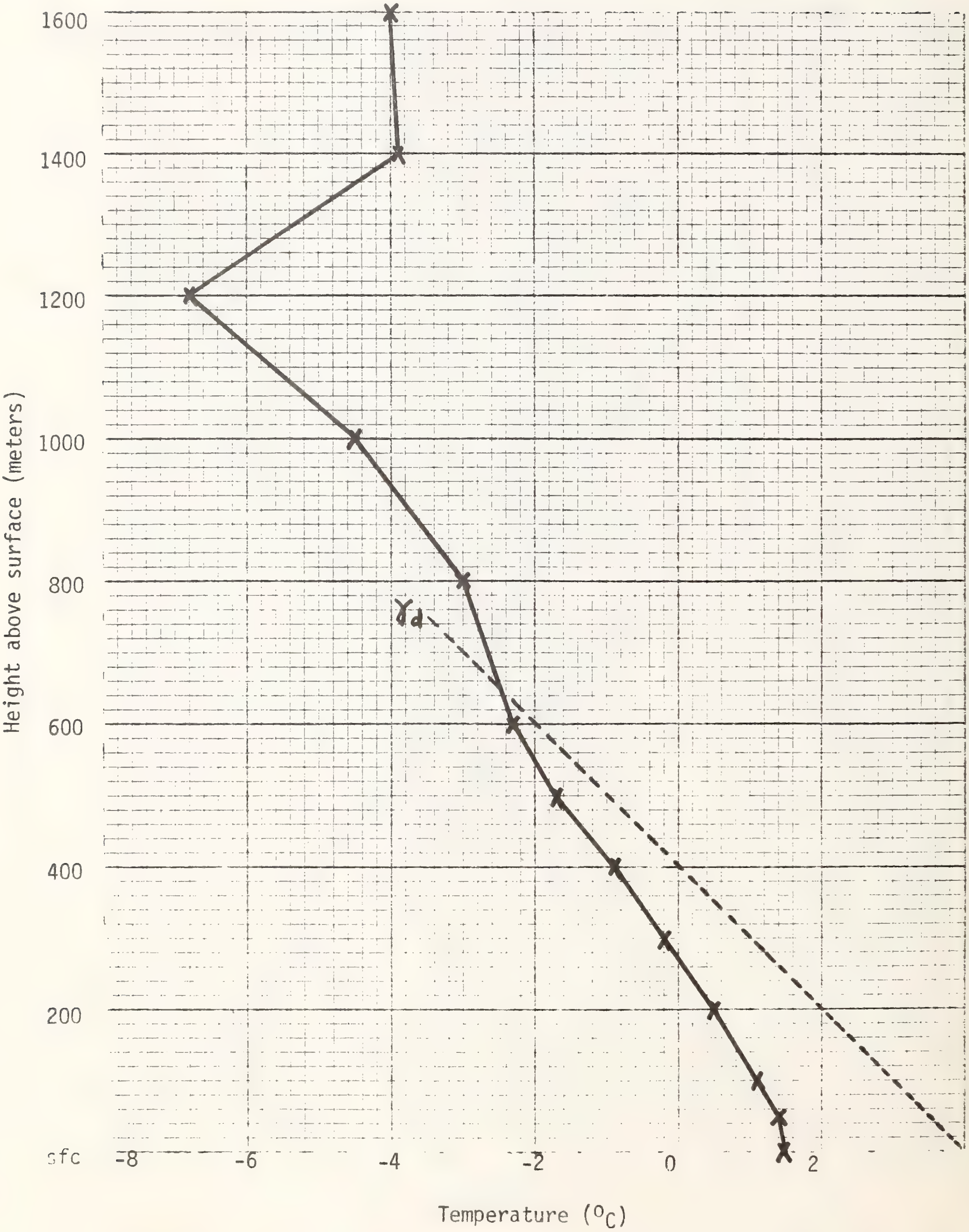
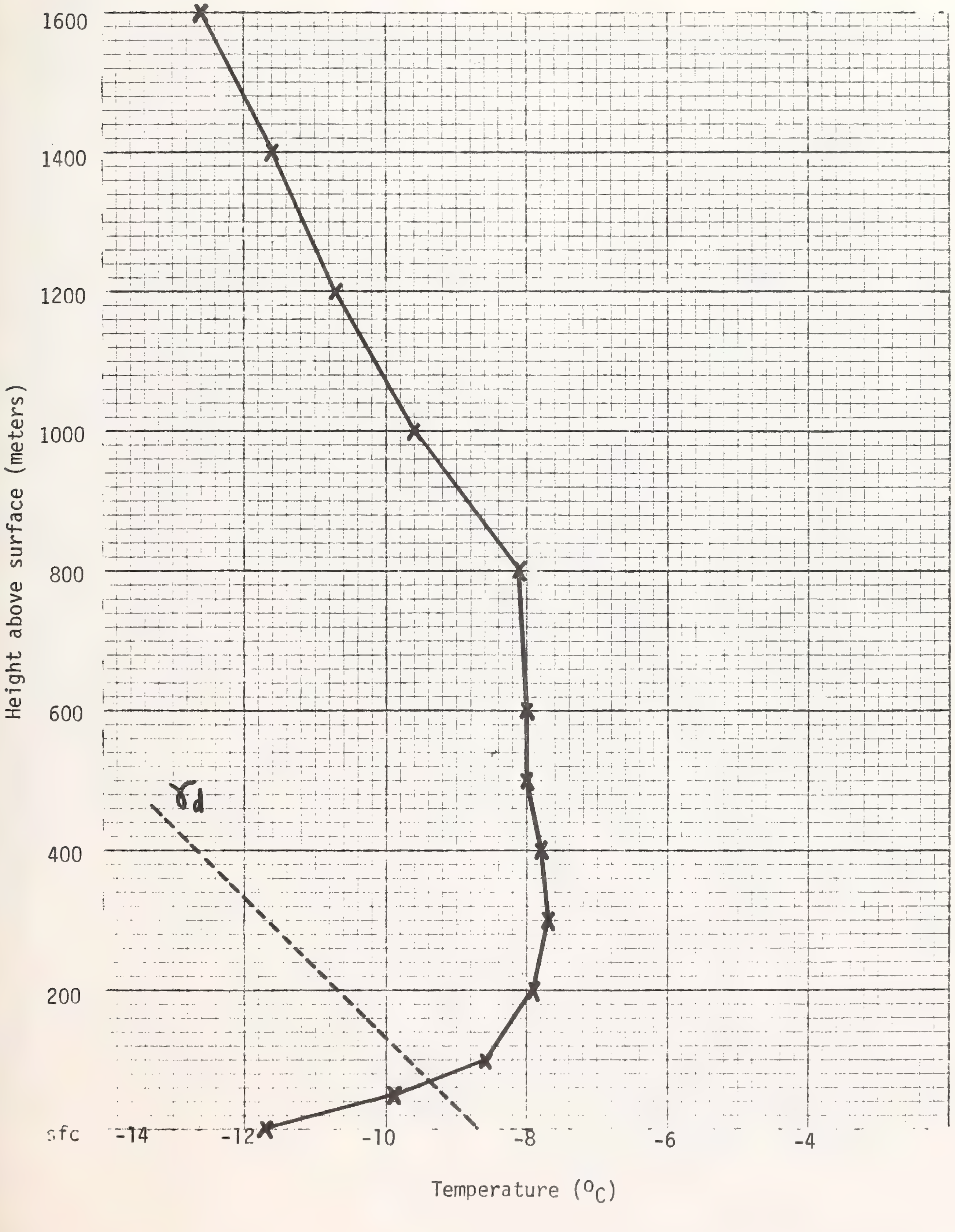
γ_d = dry adiabatic lapse rate

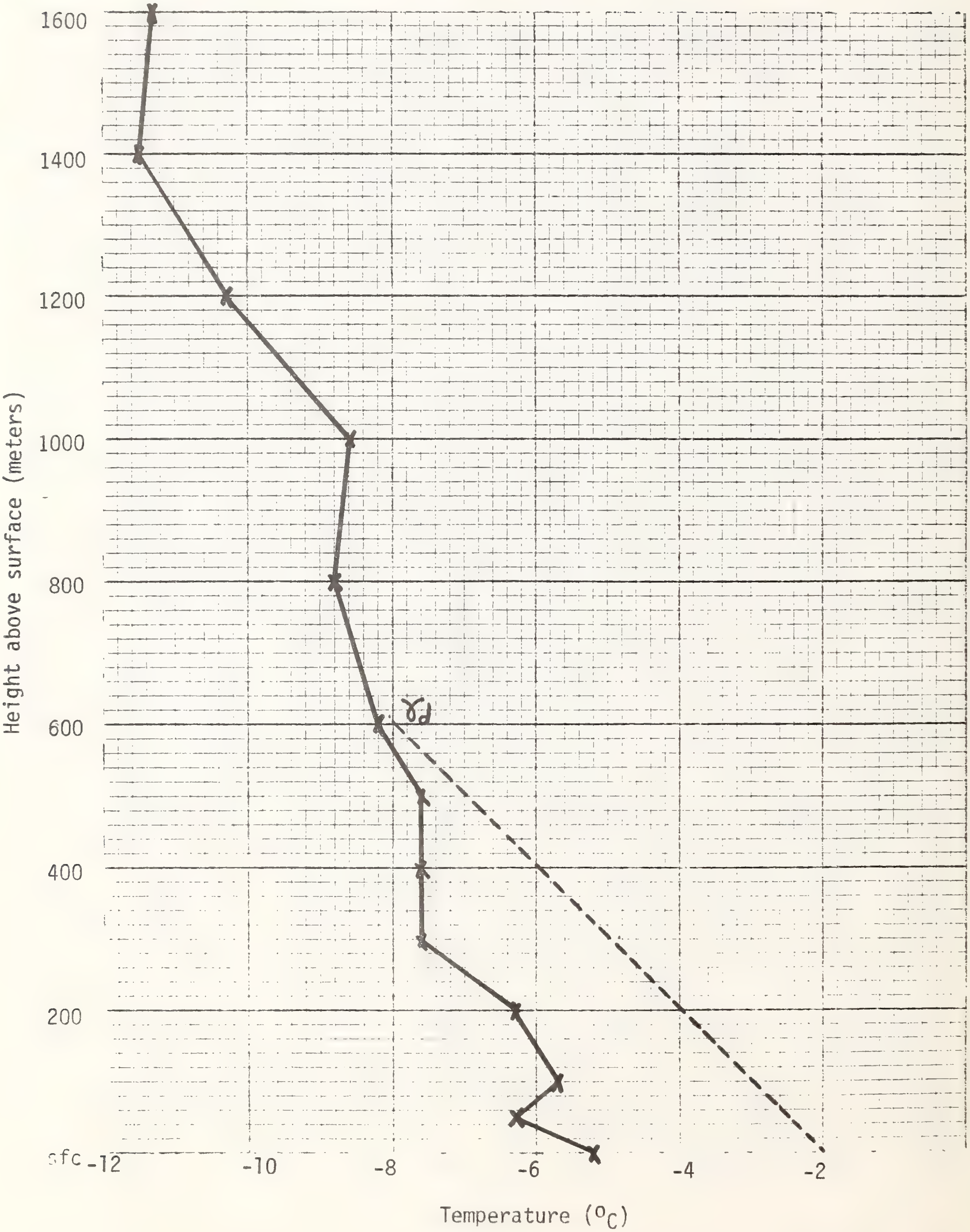


January, 1980 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate

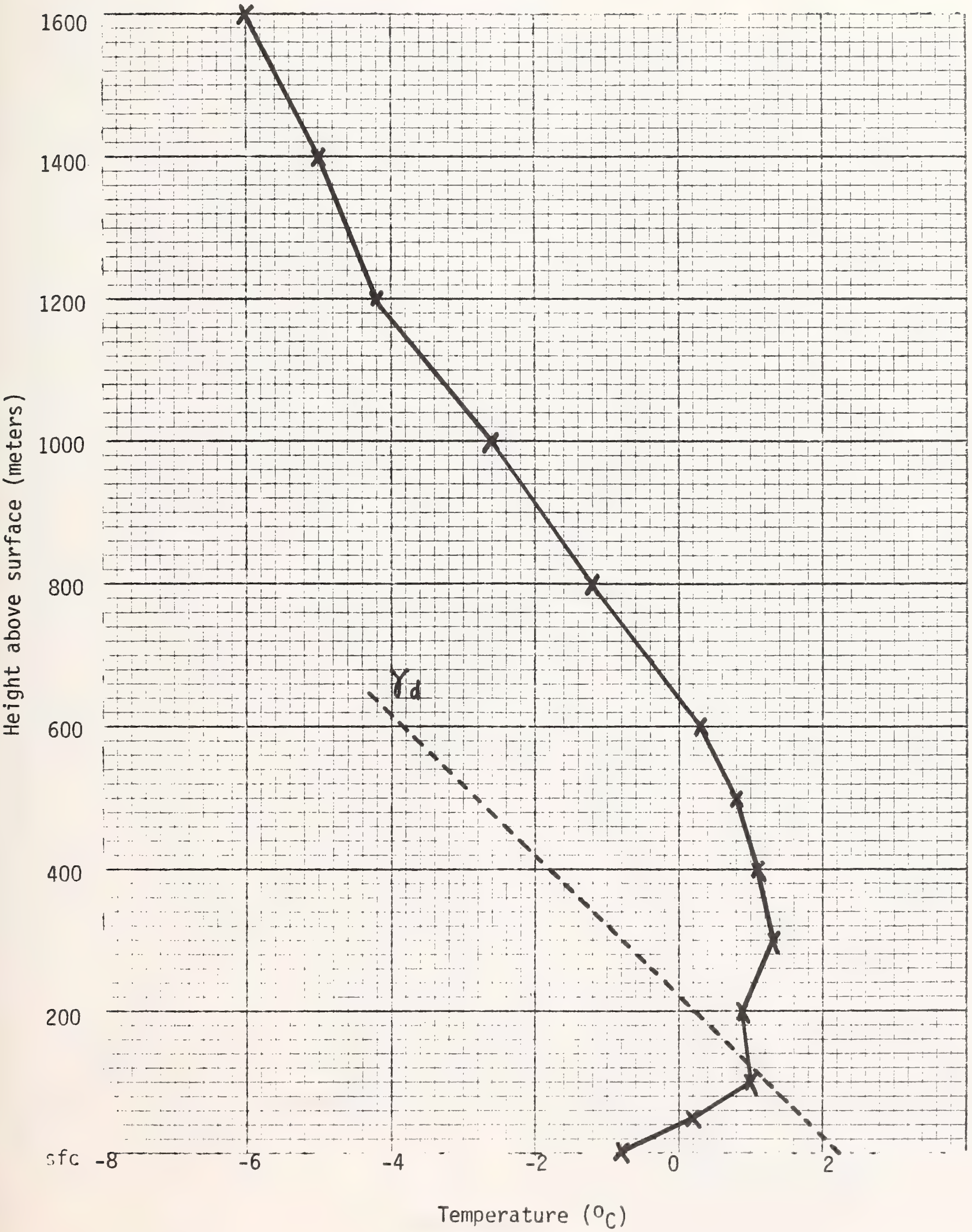


January, 1980 - Afternoon

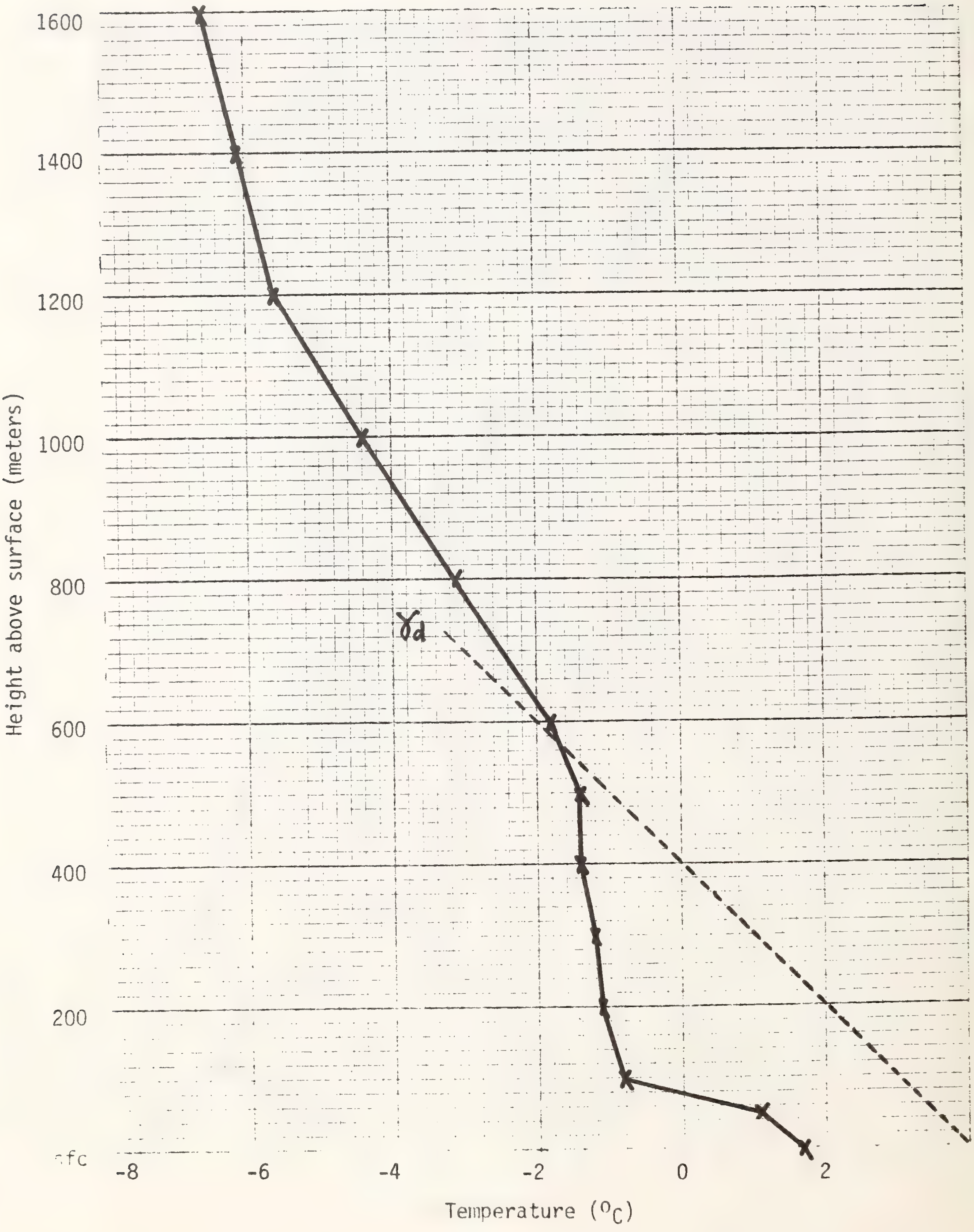
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



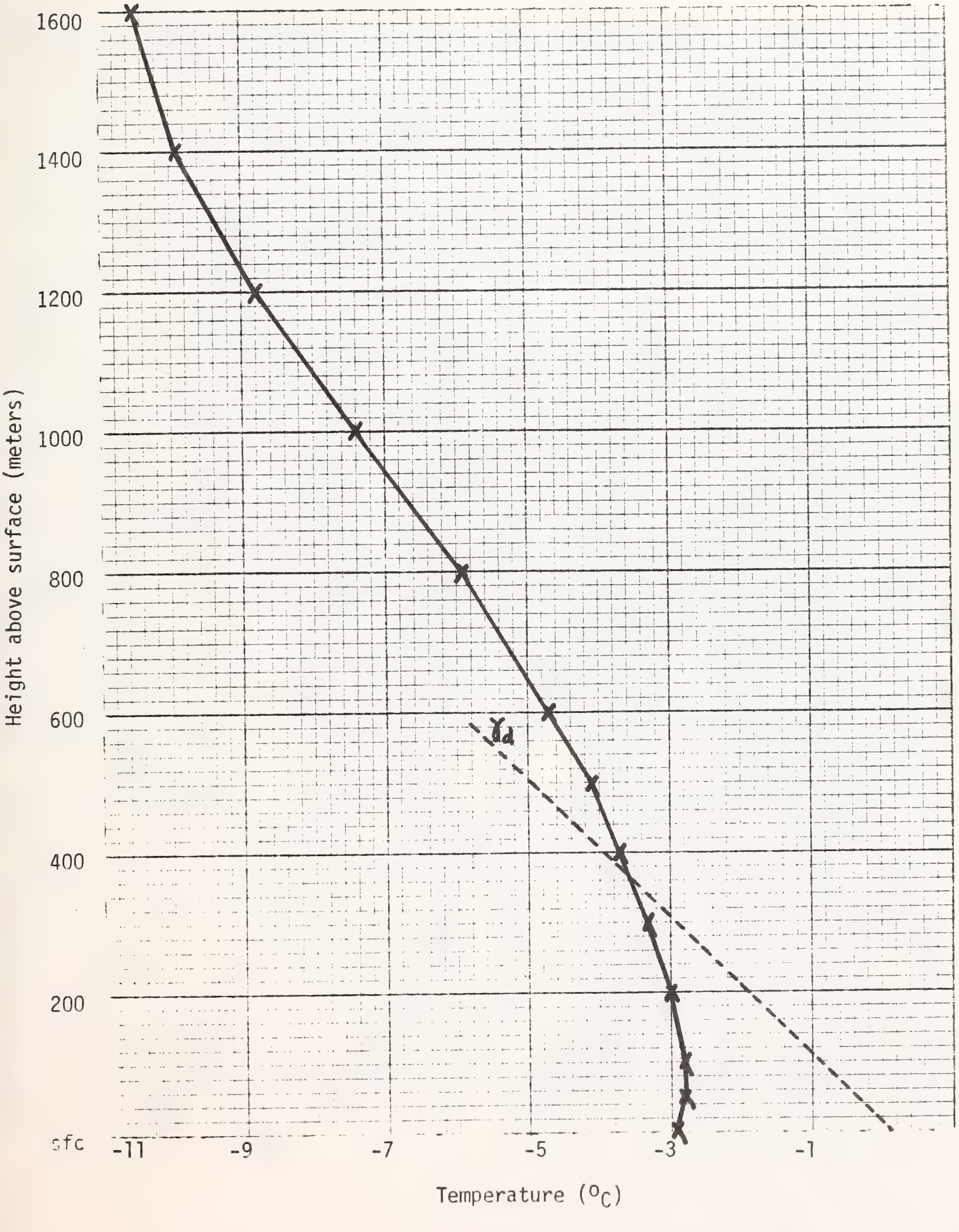
February, 1980 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



February, 1980 - Afternoon
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



March, 1980 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



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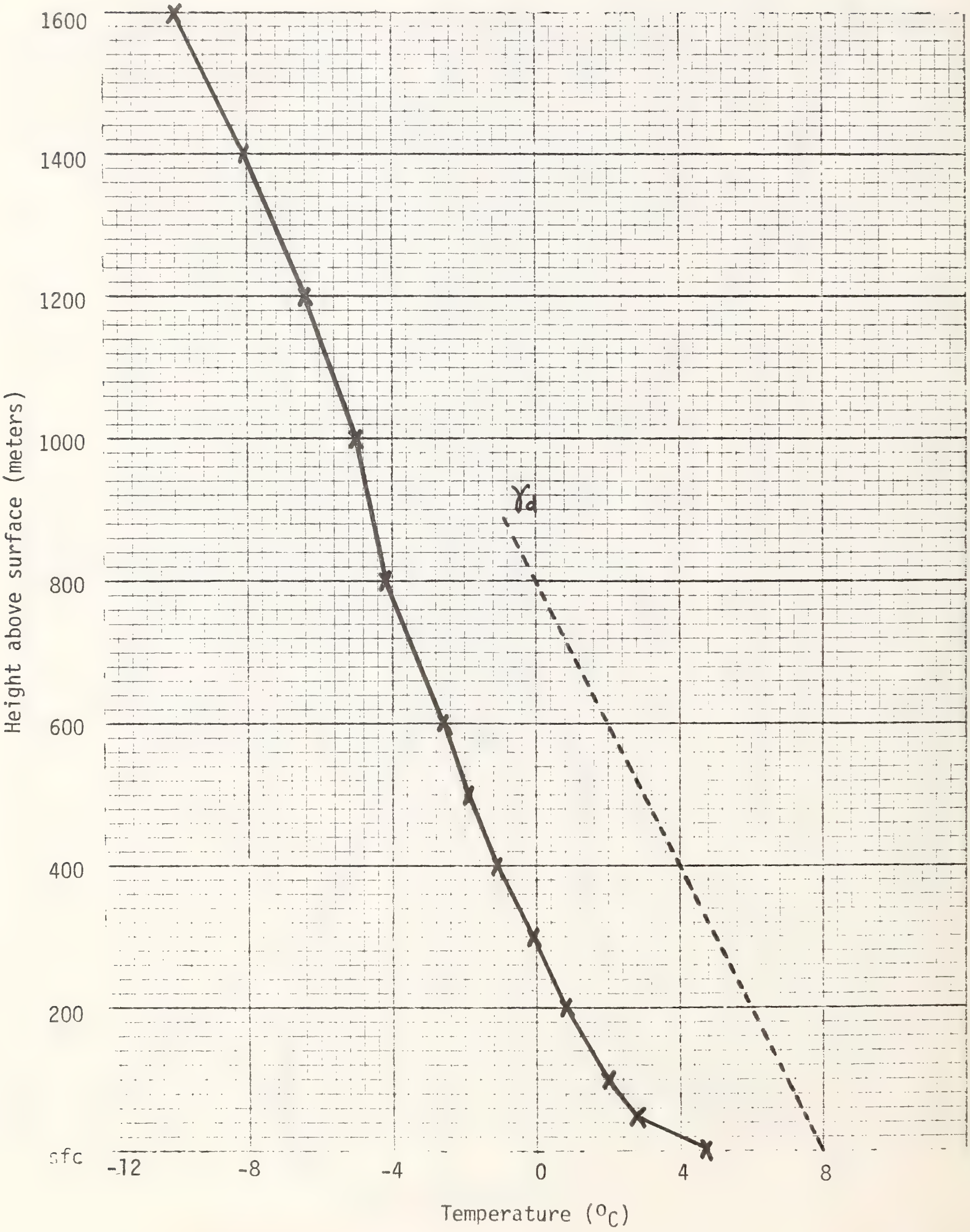
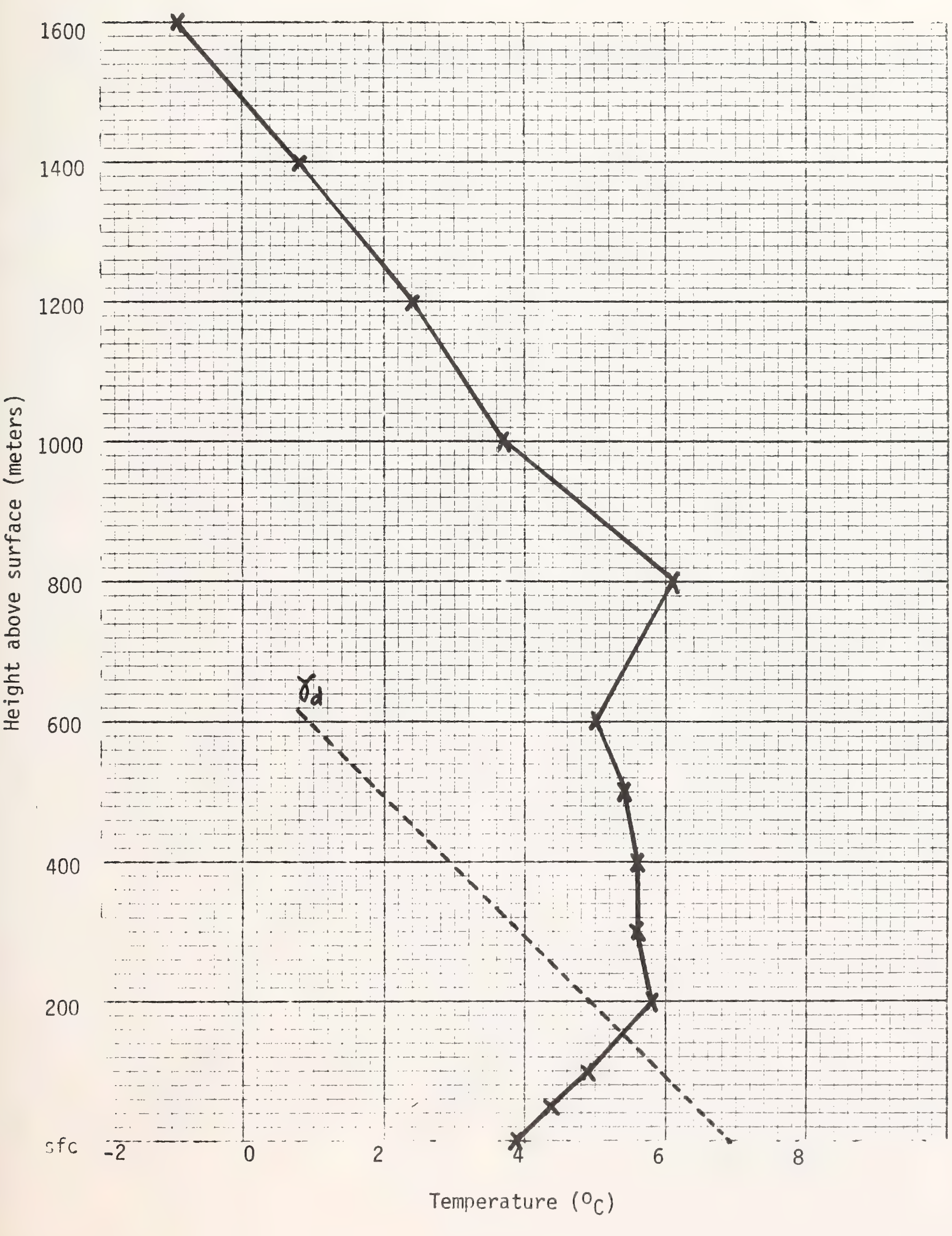
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



April, 1980 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



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Airport Site, Kalispell
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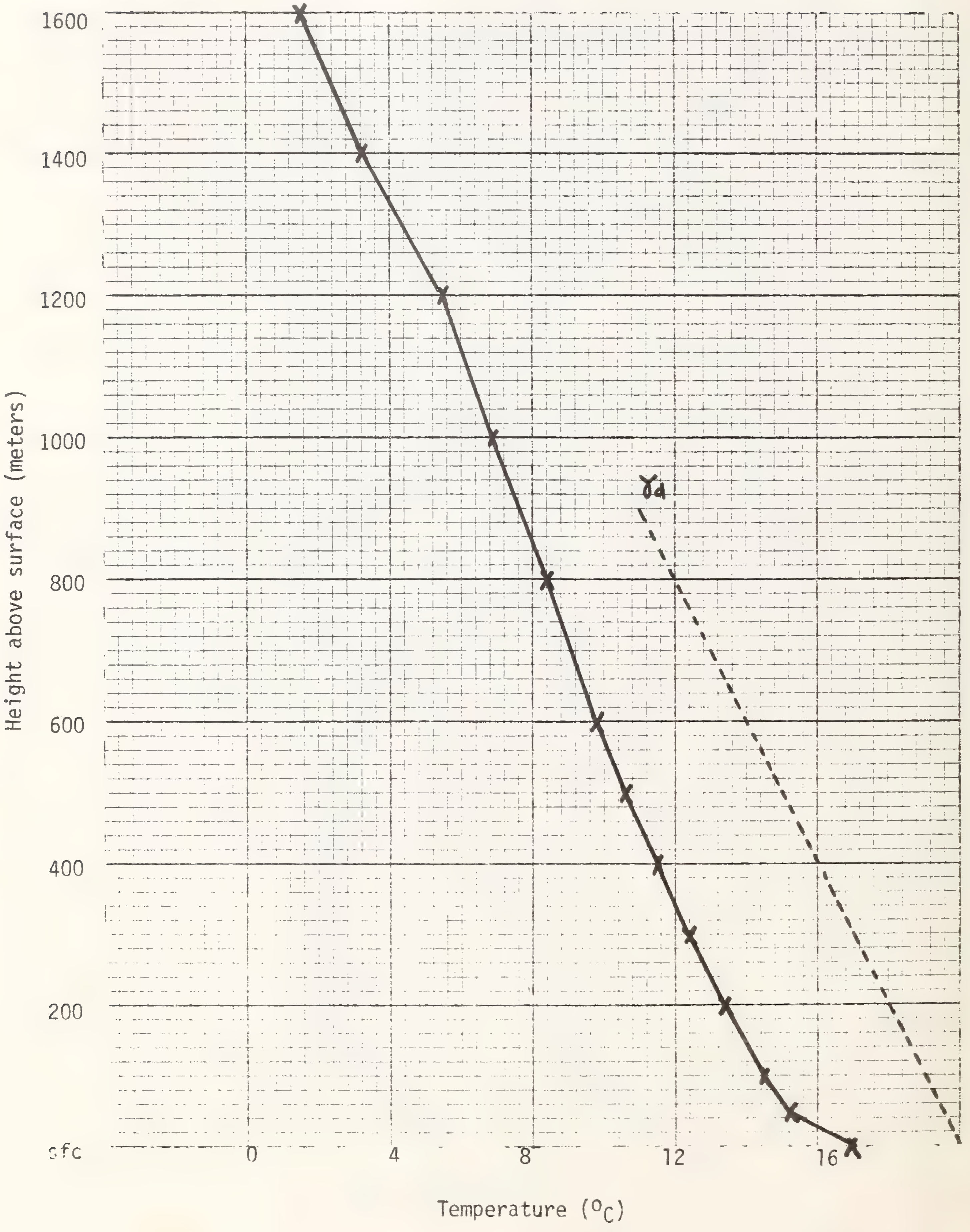
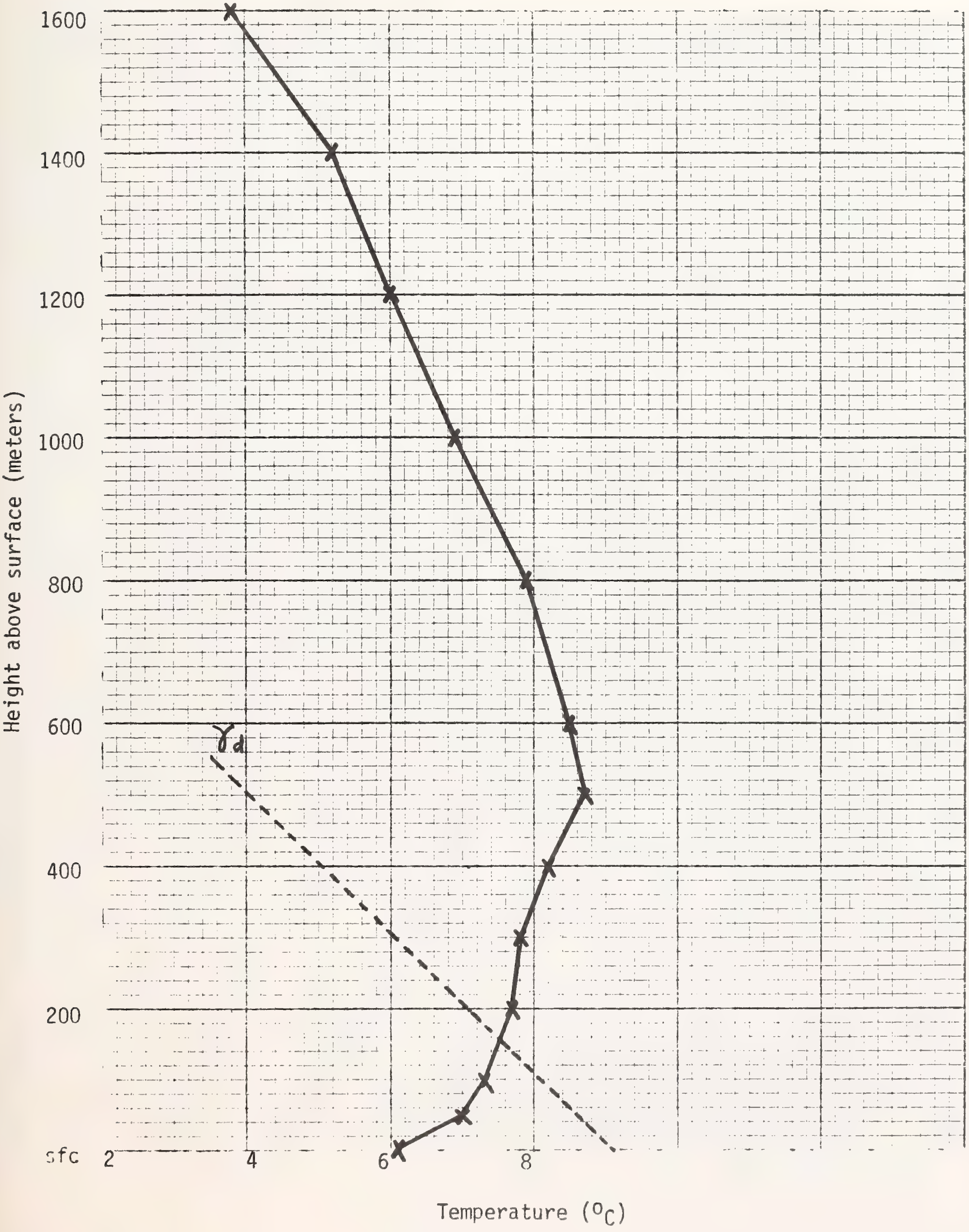


May, 1980 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



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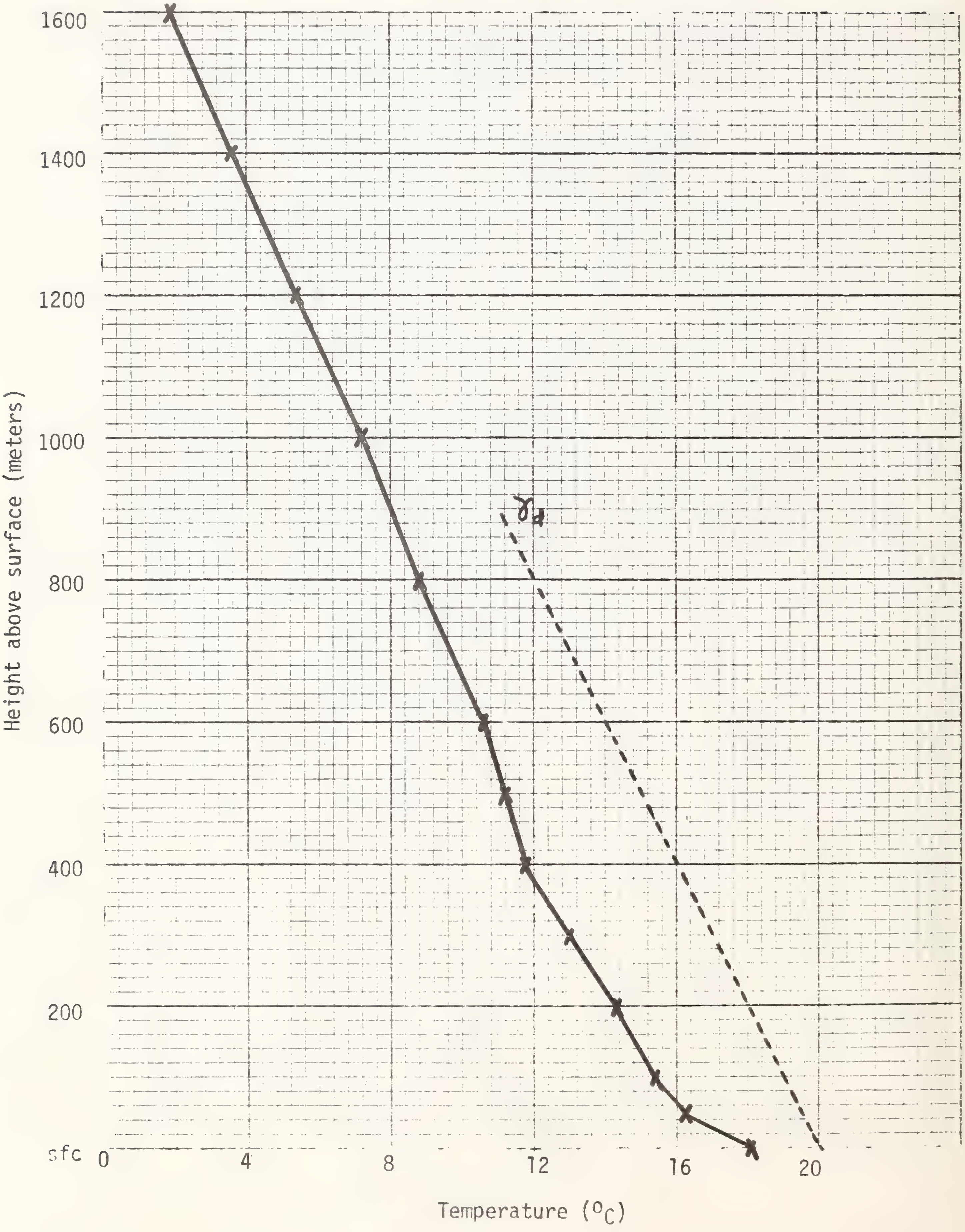
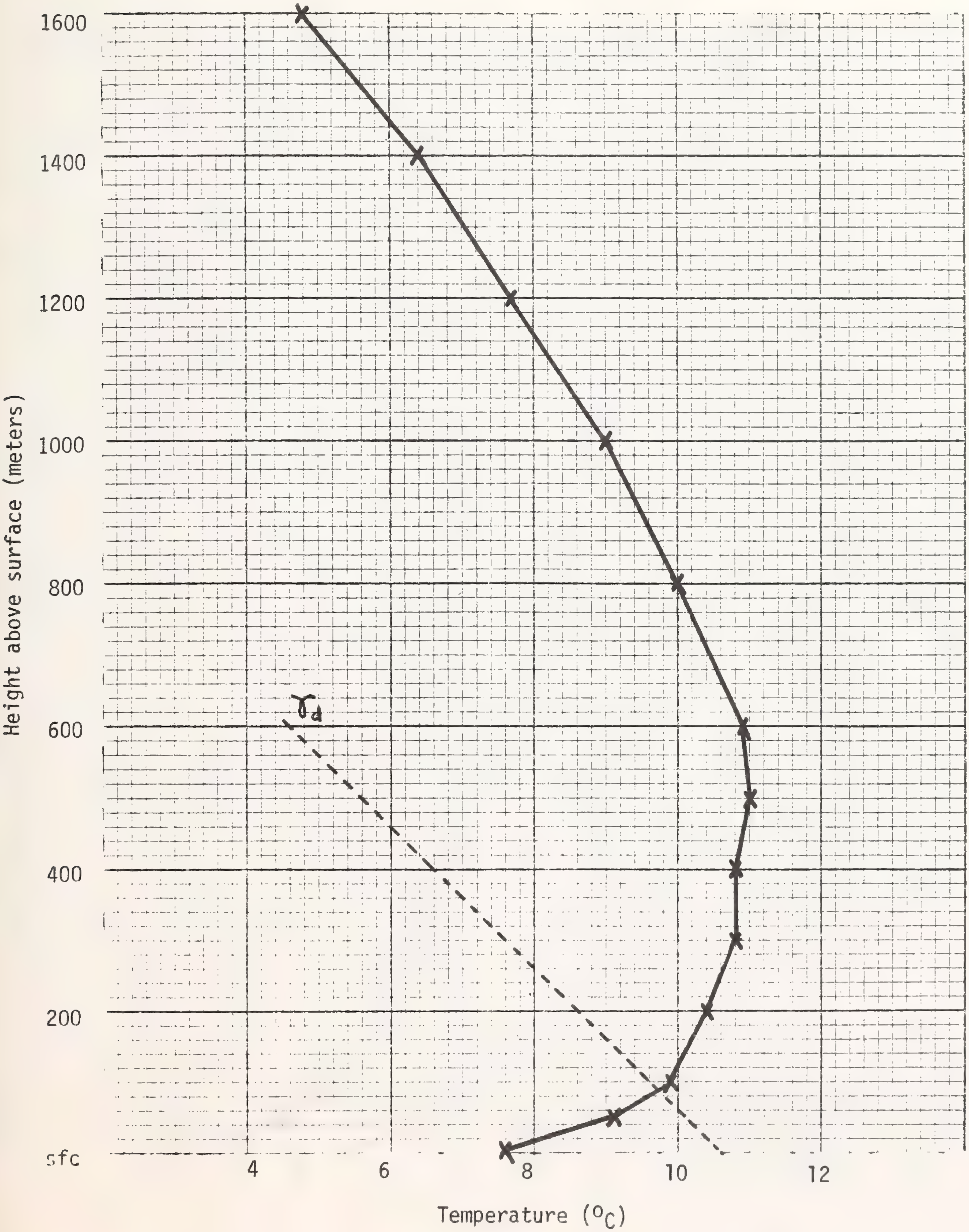
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate

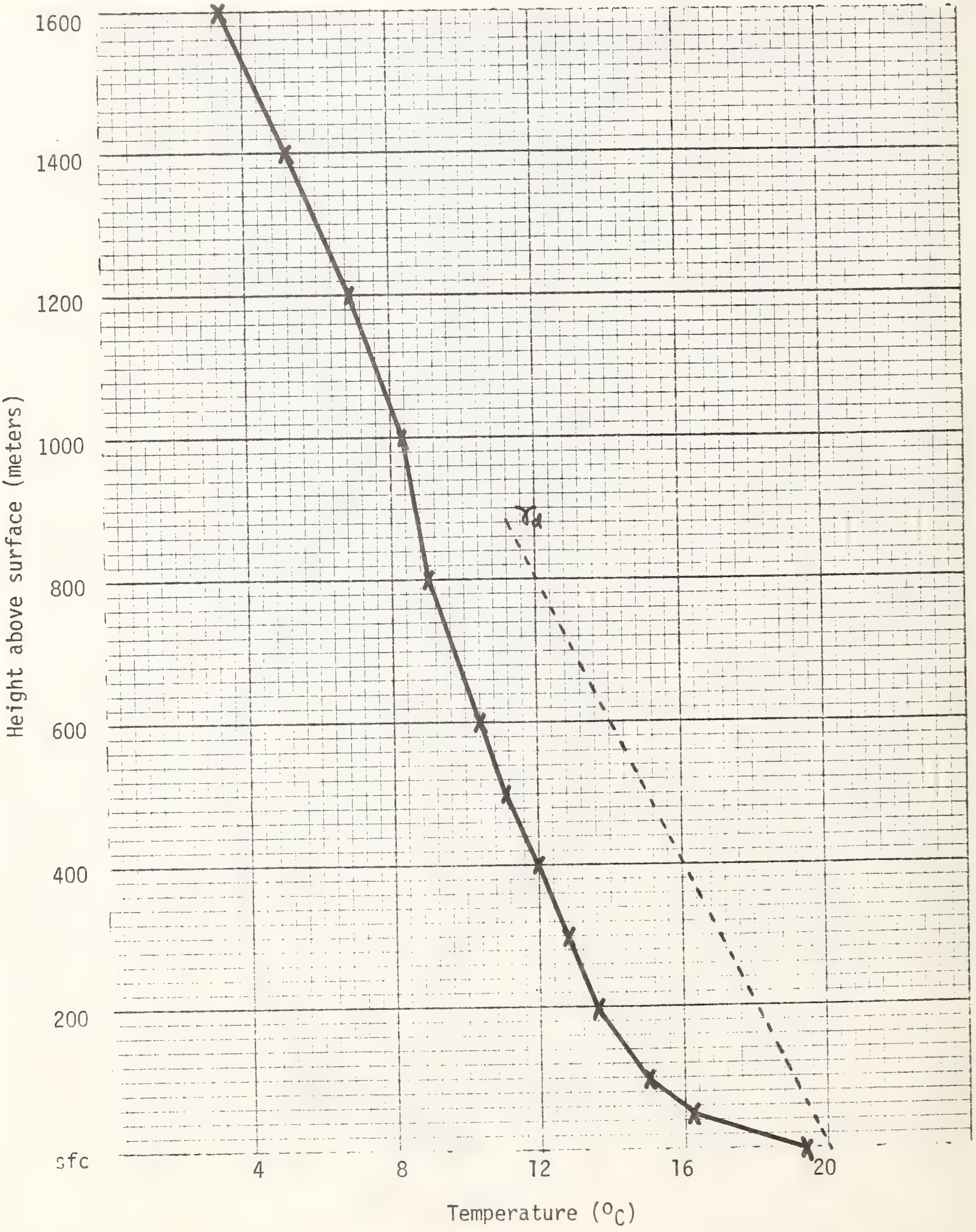


June, 1980 - Morning

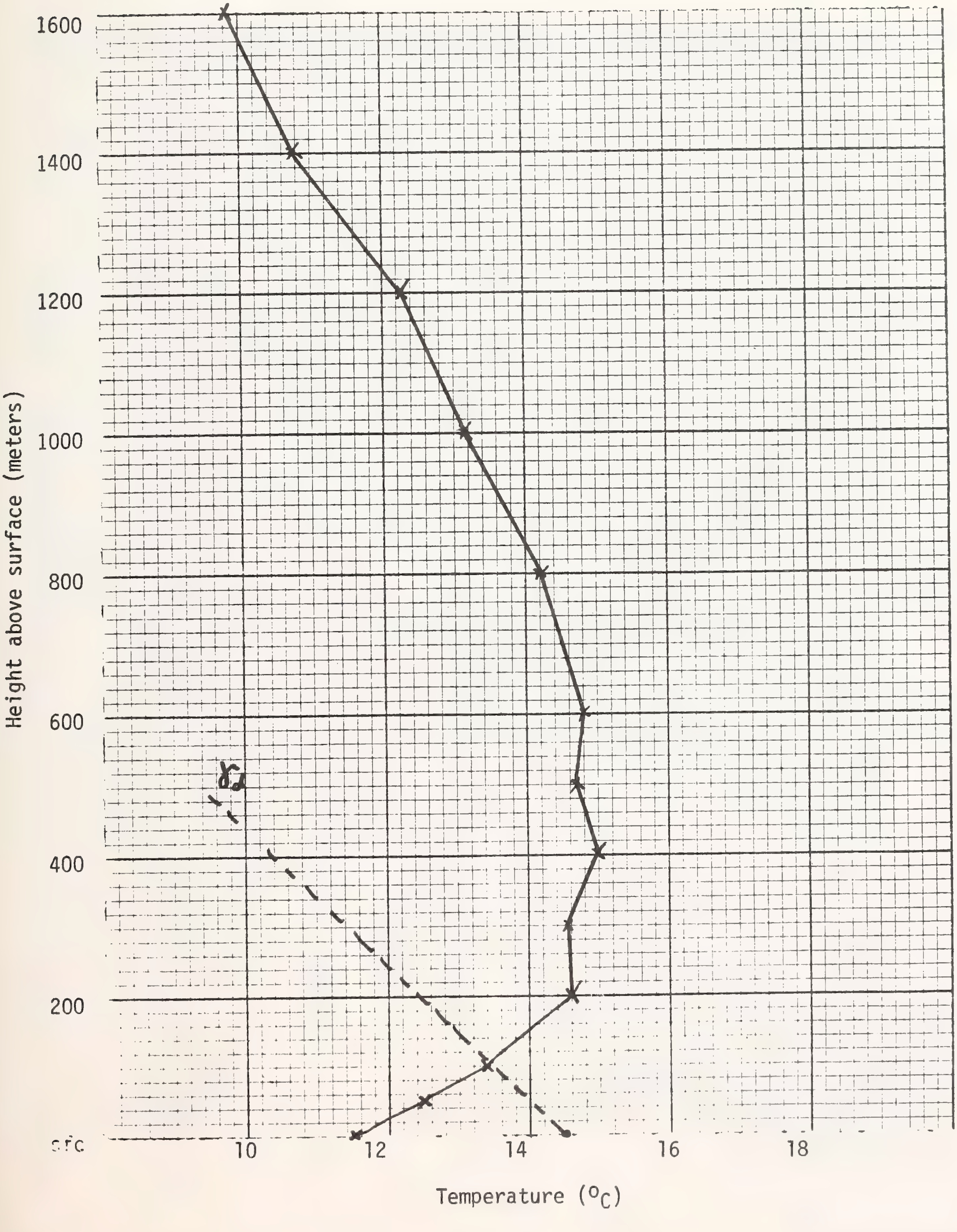
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



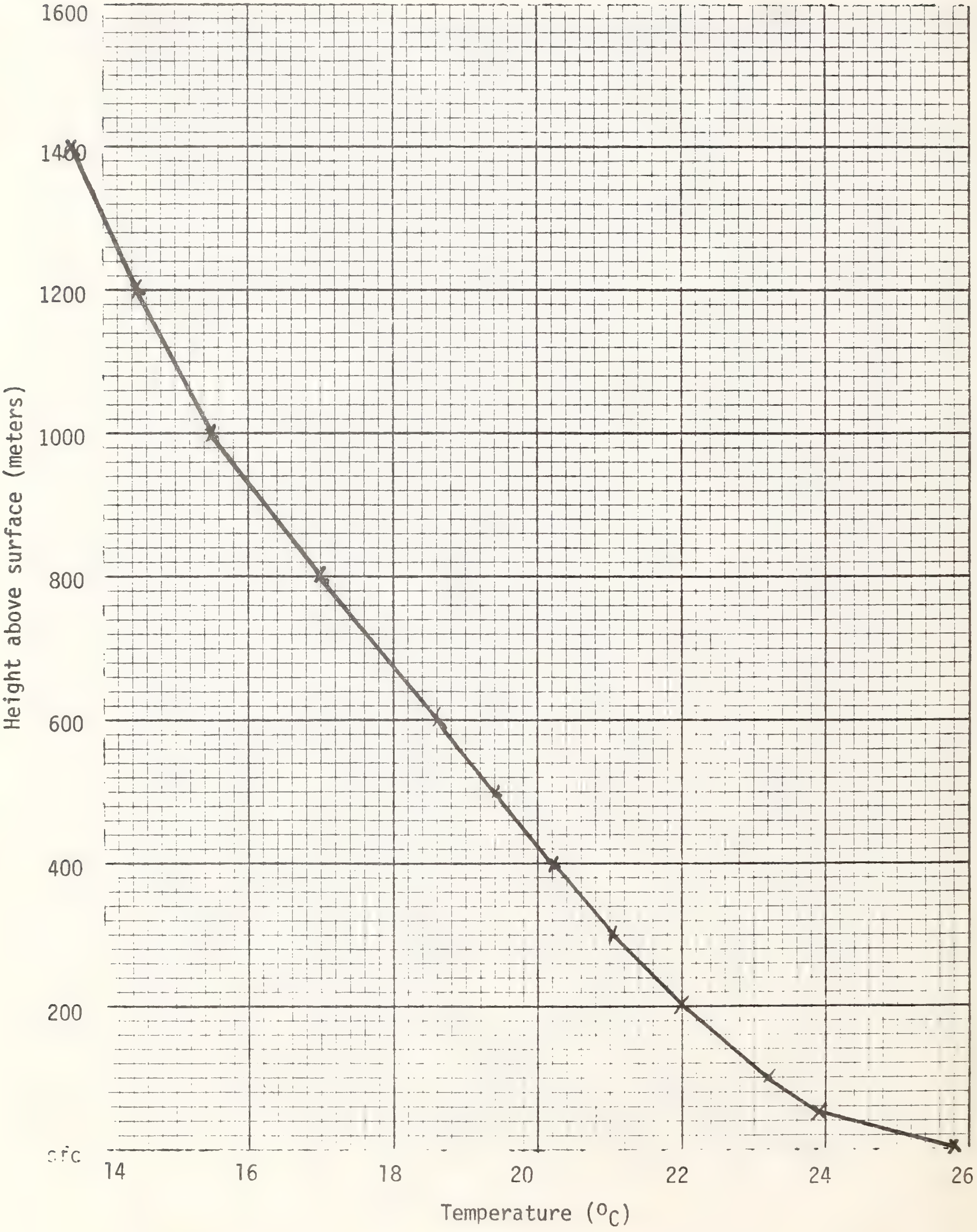
June, 1980 - Afternoon
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



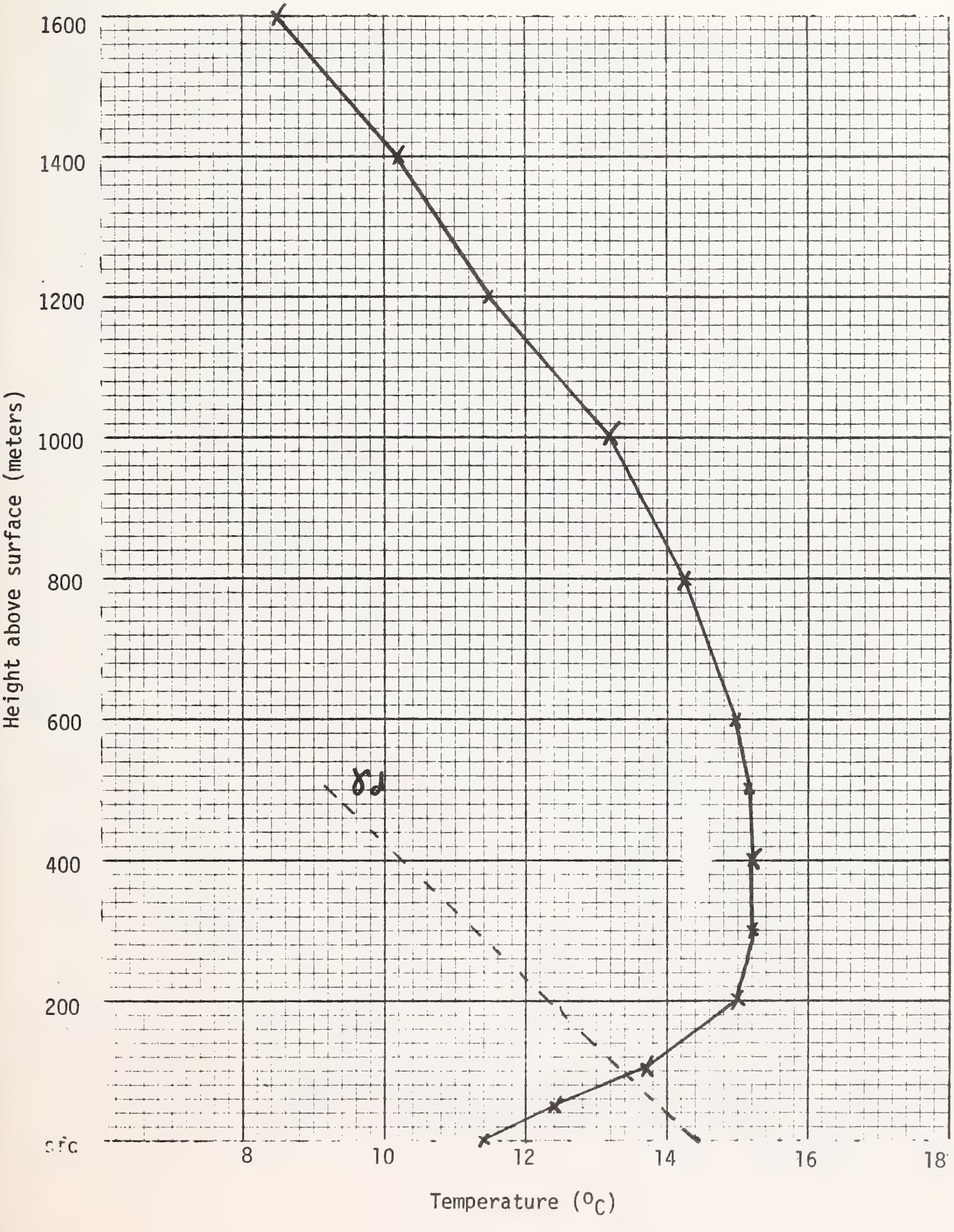
July, 1980 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



July, 1980 - Afternoon
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



August 1980 - Morning
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate

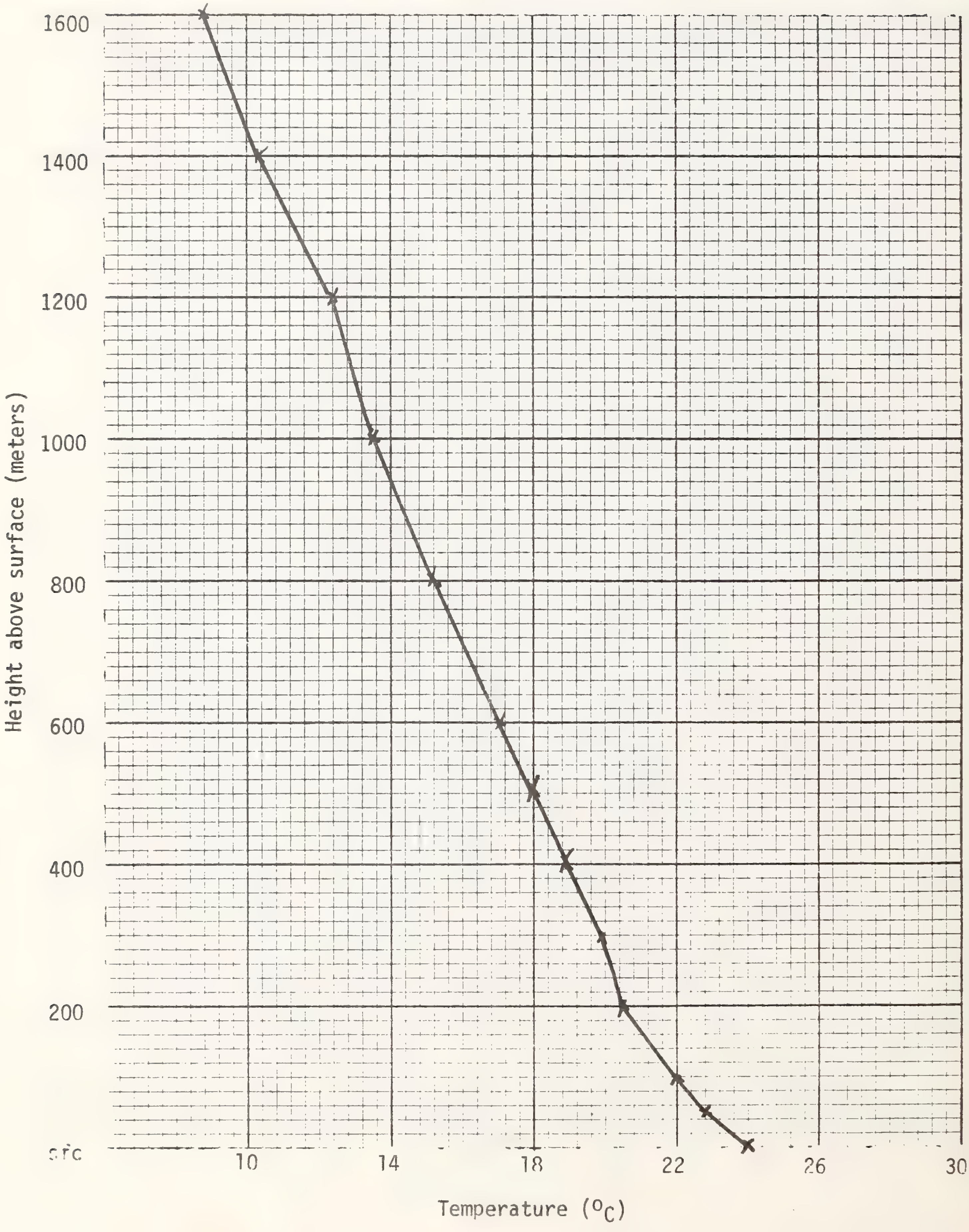


August, 1980 - Afternoon

Average Monthly Upper Air Sounding

Airport Site, Kalispell

γ_d = dry adiabatic lapse rate



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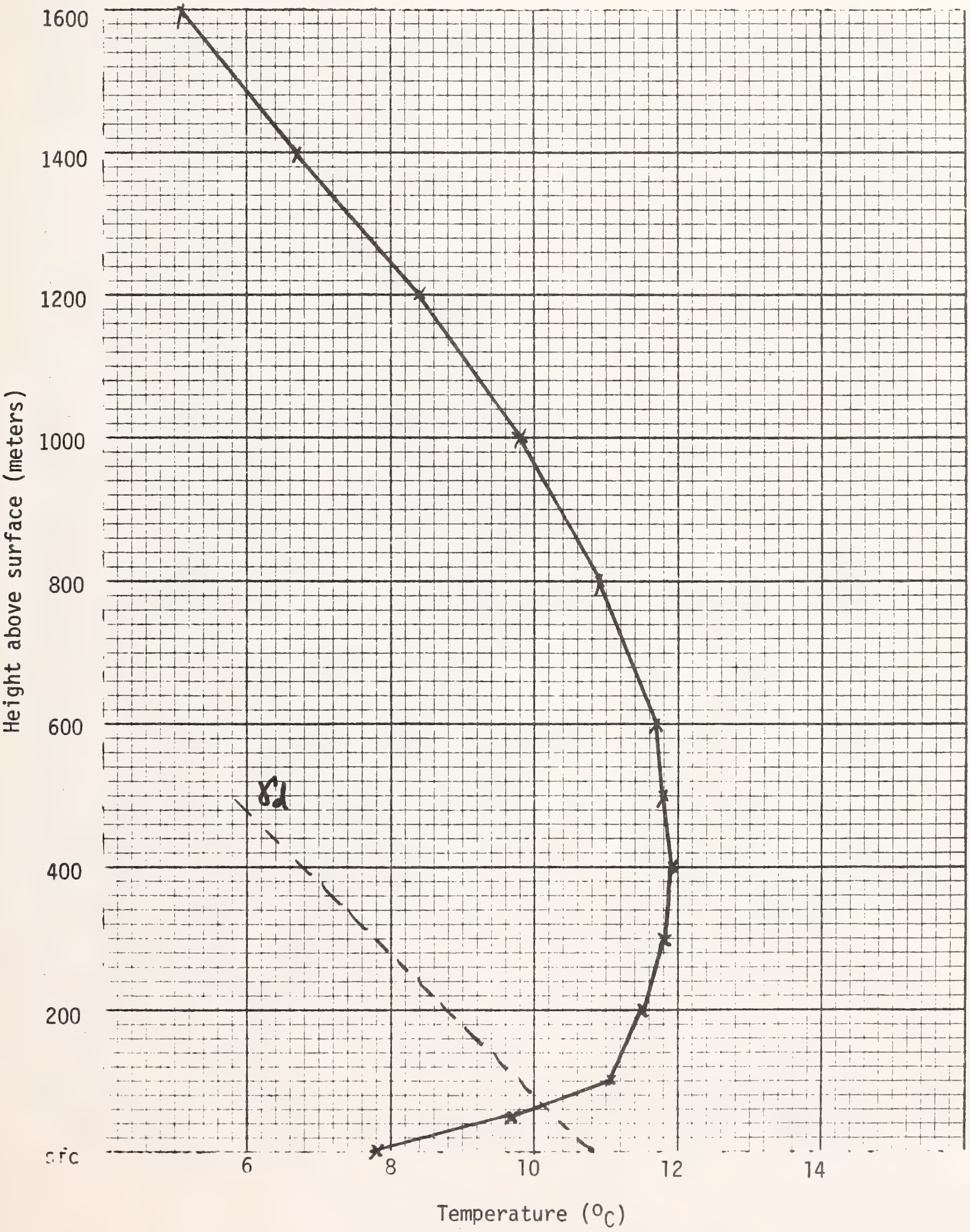
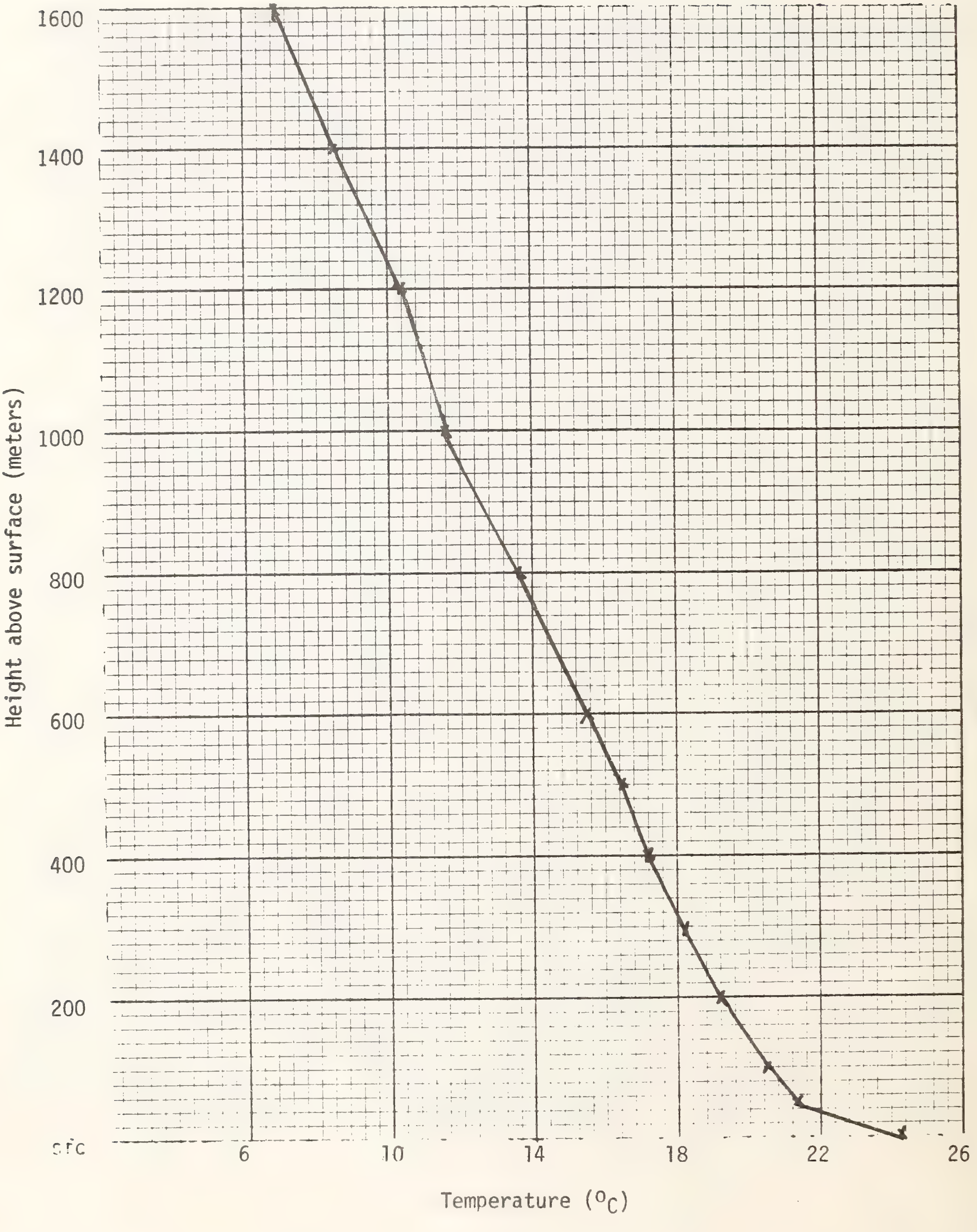
Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



September, 1980 - Afternoon

Average Monthly Upper Air Sounding
Airport Site, Kalispell
γ_d = dry adiabatic lapse rate



APPENDIX C

UPPER AIR SUMMARIES

```
               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
         SURFACE WINDS MORNING          JUNE,1978

 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN      TOTAL   TOTAL   AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT  SPEED

         N                                                     0      0.0
       NNE                                                     0      0.0
        NE           14.2                                      1     14.2     4.0
       ENE                                                     0      0.0
         E    14.2                                             1     14.2      .1
       ESE                                                     0      0.0
        SE                                                     0      0.0
       SSE                                                     0      0.0
         S    14.2                                             1     14.2     2.0
       SSW                                                     0      0.0
        SW                                                     0      0.0
       WSW                                                     0      0.0
         W                                                     0      0.0
       WNW                                                     0      0.0
        NW                                                     0      0.0
       NNW    14.2                                             1     14.2     1.0

      CALM                                                     3     42.0

COL. TOTALS   42.6   14.2                                      7              1.0
         SURFACE WINDS AFTERNOON        JUNE,1978

 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN      TOTAL   TOTAL   AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT  SPEED

         N                                                     0      0.0
       NNE                                                     0      0.0
        NE                                                     0      0.0
       ENE                                                     0      0.0
         E                                                     0      0.0
       ESE                                                     0      0.0
        SE                                                     0      0.0
       SSE           25.0                                      1     25.0     3.0
         S           25.0   25.0                               2     50.0     5.5
       SSW                                                     0      0.0
        SW                                                     0      0.0
       WSW                                                     0      0.0
         W                                                     0      0.0
       WNW                                                     0      0.0
        NW                                                     0      0.0
       NNW    25.0                                             1     25.0     1.5

      CALM                                                     0      0.0

COL. TOTALS   25.0   50.0   25.0                               4              3.8
```

```
               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
100 METER LEVEL WINDS MORNING           JUNE,1978

 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN      TOTAL   TOTAL   AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT  SPEED

         N           14.2                                      1     14.2     3.9
       NNE                                                     0      0.0
        NE    14.2   28.5                                      3     42.7     3.7
       ENE                                                     0      0.0
         E                                                     0      0.0
       ESE                                                     0      0.0
        SE                                                     0      0.0
       SSE                  14.2                               1     14.2     6.0
         S           14.2                                      1     14.2     4.6
       SSW                                                     0      0.0
        SW                                                     0      0.0
       WSW                                                     0      0.0
         W                                                     0      0.0
       WNW                                                     0      0.0
        NW                                                     0      0.0
       NNW    14.2                                             1     14.2     2.4

      CALM                                                     0      0.0

COL. TOTALS   28.4   56.9   14.2                               7              4.0
100 METER LEVEL WINDS AFTERNOON         JUNE,1978

 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN      TOTAL   TOTAL   AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT  SPEED

         N    25.0                                             1     25.0     1.6
       NNE                                                     0      0.0
        NE                                                     0      0.0
       ENE                                                     0      0.0
         E                                                     0      0.0
       ESE                                                     0      0.0
        SE                                                     0      0.0
       SSE                  25.0                               1     25.0     8.3
         S    25.0   25.0                                      2     50.0     2.6
       SSW                                                     0      0.0
        SW                                                     0      0.0
       WSW                                                     0      0.0
         W                                                     0      0.0
       WNW                                                     0      0.0
        NW                                                     0      0.0
       NNW                                                     0      0.0

      CALM                                                     0      0.0

COL. TOTALS   50.0   25.0   25.0                               4              3.8
```

```
          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 200 METER LEVEL WINDS MORNING          JUNE,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

         N         14.2                                  1   14.2    5.8
       NNE               14.2                            1   14.2    6.0
        NE   14.2                                        1   14.2    2.9
       ENE   14.2                                        1   14.2    1.6
         E                                               0    0.0
       ESE                                               0    0.0
        SE         14.2                                  1   14.2    5.2
       SSE               14.2                            1   14.2    6.3
         S                                               0    0.0
       SSW                                               0    0.0
        SW                                               0    0.0
       WSW                                               0    0.0
         W                                               0    0.0
       WNW                                               0    0.0
        NW                                               0    0.0
       NNW               14.2                            1   14.2    7.0

      CALM                                               0    0.0

COL. TOTALS  28.4  28.4  42.6                            7           4.9
 200 METER LEVEL WINDS AFTERNOON        JUNE,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

         N   25.0                                        1   25.0    2.4
       NNE                                               0    0.0
        NE                                               0    0.0
       ENE                                               0    0.0
         E                                               0    0.0
       ESE                                               0    0.0
        SE                                               0    0.0
       SSE         25.0  25.0                            2   50.0    6.1
         S         25.0                                  1   25.0    4.0
       SSW                                               0    0.0
        SW                                               0    0.0
       WSW                                               0    0.0
         W                                               0    0.0
       WNW                                               0    0.0
        NW                                               0    0.0
       NNW                                               0    0.0

      CALM                                               0    0.0

COL. TOTALS  25.0  50.0  25.0                            4           4.6
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 300 METER LEVEL WINDS MORNING          JUNE,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

         N                                               0    0.0
       NNE         14.2  14.2                            2   28.4    5.7
        NE                                               0    0.0
       ENE         14.2                                  1   14.2    3.2
         E                                               0    0.0
       ESE                                               0    0.0
        SE                                               0    0.0
       SSE         14.2                                  1   14.2    3.7
         S                                               0    0.0
       SSW   14.2        14.2                            2   28.4    4.2
        SW                                               0    0.0
       WSW                                               0    0.0
         W                                               0    0.0
       WNW                                               0    0.0
        NW         14.2                                  1   14.2    3.8
       NNW                                               0    0.0

      CALM                                               0    0.0

COL. TOTALS  14.2  56.8  28.4                            7           4.3
 300 METER LEVEL WINDS AFTERNOON        JUNE,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

         N   25.0                                        1   25.0    1.8
       NNE                                               0    0.0
        NE                                               0    0.0
       ENE                                               0    0.0
         E                                               0    0.0
       ESE                                               0    0.0
        SE                                               0    0.0
       SSE         50.0  25.0                            3   75.0    5.4
         S                                               0    0.0
       SSW                                               0    0.0
        SW                                               0    0.0
       WSW                                               0    0.0
         W                                               0    0.0
       WNW                                               0    0.0
        NW                                               0    0.0
       NNW                                               0    0.0

      CALM                                               0    0.0

COL. TOTALS  25.0  50.0  25.0                            4           4.5
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```
               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
500 METER LEVEL WINDS MORNING          JUNE,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

      N                                                   0      0.0
    NNE             16.6                                  1     16.6      3.9
     NE                                                   0      0.0
    ENE                                                   0      0.0
      E                                                   0      0.0
    ESE       16.6  16.6  16.6                            3     49.8      3.8
     SE                                                   0      0.0
    SSE                                                   0      0.0
      S             16.6                                  1     16.6      5.9
    SSW                                                   0      0.0
     SW             16.6                                  1     16.6      4.5
    WSW                                                   0      0.0
      W                                                   0      0.0
    WNW                                                   0      0.0
     NW                                                   0      0.0
    NNW                                                   0      0.0

   CALM                                                   0      0.0

COL. TOTALS   16.6  66.4  16.6                            6               4.3
500 METER LEVEL WINDS AFTERNOON          JUNE,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

      N                                                   0      0.0
    NNE                                                   0      0.0
     NE                                                   0      0.0
    ENE                                                   0      0.0
      E                                                   0      0.0
    ESE                                                   0      0.0
     SE                                                   0      0.0
    SSE             50.0                                  2     50.0      5.4
      S       25.0                                        1     25.0      2.2
    SSW                                                   0      0.0
     SW                                                   0      0.0
    WSW                                                   0      0.0
      W                                                   0      0.0
    WNW                                                   0      0.0
     NW                                                   0      0.0
    NNW       25.0                                        1     25.0      1.4

   CALM                                                   0      0.0

COL. TOTALS   50.0  50.0                                  4               3.6
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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
750 METER LEVEL WINDS MORNING          JUNE,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

      N                                                   0      0.0
    NNE       25.0                                        1     25.0      2.7
     NE                                                   0      0.0
    ENE                                                   0      0.0
      E                                                   0      0.0
    ESE                                                   0      0.0
     SE                   25.0                            1     25.0      9.4
    SSE                                                   0      0.0
      S       25.0                                        1     25.0      2.5
    SSW                                                   0      0.0
     SW                                                   0      0.0
    WSW       25.0                                        1     25.0      1.6
      W                                                   0      0.0
    WNW                                                   0      0.0
     NW                                                   0      0.0
    NNW                                                   0      0.0

   CALM                                                   0      0.0

COL. TOTALS   75.0        25.0                            4               4.0
750 METER LEVEL WINDS AFTERNOON          JUNE,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

      N                                                   0      0.0
    NNE                                                   0      0.0
     NE                                                   0      0.0
    ENE                                                   0      0.0
      E                                                   0      0.0
    ESE                                                   0      0.0
     SE                                                   0      0.0
    SSE       50.0                                        1     50.0      2.5
      S                                                   0      0.0
    SSW                                                   0      0.0
     SW             50.0                                  1     50.0      4.4
    WSW                                                   0      0.0
      W                                                   0      0.0
    WNW                                                   0      0.0
     NW                                                   0      0.0
    NNW                                                   0      0.0

   CALM                                                   0      0.0

COL. TOTALS   50.0  50.0                                  2               3.4
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING JUNE,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		25.0					1	25.0	3.8
ENE							0	0.0	
E							0	0.0	
ESE	25.0					25.0	2	50.0	20.0
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW		25.0					1	25.0	3.4
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	25.0	50.0				25.0	4		11.8

1000 METER LEVEL WINDS AFTERNOON JUNE,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W		100.0					1	100.0	5.4
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		100.0					1		5.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING JUNE,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW	100.0						1	100.0	.8
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	100.0						1		.8

1500 METER LEVEL WINDS AFTERNOON JUNE,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W			100.0				1	100.0	8.7
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS			100.0				1		8.7

```
               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING          JUNE,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
               00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
                TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

        N                                                 0     0.0
      NNE                                                 0     0.0
       NE                                                 0     0.0
      ENE                                                 0     0.0
        E                                                 0     0.0
      ESE                                                 0     0.0
       SE                                                 0     0.0
      SSE                                                 0     0.0
        S                                                 0     0.0
      SSW                                                 0     0.0
       SW                                                 0     0.0
      WSW                                                 0     0.0
        W                                                 0     0.0
      WNW                                                 0     0.0
       NW                                                 0     0.0
      NNW                                                 0     0.0

     CALM                                                 0     0.0

COL. TOTALS                                               0
2000 METER LEVEL WINDS AFTERNOON        JUNE,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
               00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
                TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

        N                                                 0     0.0
      NNE                                                 0     0.0
       NE                                                 0     0.0
      ENE                                                 0     0.0
        E                                                 0     0.0
      ESE                                                 0     0.0
       SE                                                 0     0.0
      SSE                                                 0     0.0
        S                                                 0     0.0
      SSW                                                 0     0.0
       SW                                                 0     0.0
      WSW                                                 0     0.0
        W                  100.0                          1   100.0     9.1
      WNW                                                 0     0.0
       NW                                                 0     0.0
      NNW                                                 0     0.0

     CALM                                                 0     0.0

COL. TOTALS                100.0                          1             9.1
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             FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CC - AIRPORT - FLATHEAD STUDY MET
        SURFACE WINDS MORNING          JULY,1978
DIRECTION    ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW SUMMARY
              TO    TO    TO    TO    TO     THAN    TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N     8.3                                        1    8.3     1.1
      NNE    25.0                                        3   25.0     1.7
       NE     8.3                                        1    8.3     1.5
      ENE     8.3                                        1    8.3      .8
        E                                                0    0.0
      ESE                                                0    0.0
       SE                                                0    0.0
      SSE     8.3   8.3                                  2   16.6     2.0
        S                                                0    0.0
      SSW                                                0    0.0
       SW                                                0    0.0
      WSW                                                0    0.0
        W                                                0    0.0
      WNW     8.3                                        1    8.3      .5
       NW                                                0    0.0
      NNW    25.0                                        3   25.0     1.2

     CALM                                                0    0.0

COL. TOTALS  91.5   8.3                                 12            1.4
        SURFACE WINDS AFTERNOON        JULY,1978
DIRECTION    ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW SUMMARY
              TO    TO    TO    TO    TO     THAN    TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N                                                0    0.0
      NNE                                                0    0.0
       NE                                                0    0.0
      ENE    10.0                                        1   10.0     1.3
        E                                                0    0.0
      ESE    10.0                                        1   10.0     2.6
       SE                                                0    0.0
      SSE                20.0                            2   20.0     6.8
        S          20.0                                  2   20.0     3.5
      SSW                                                0    0.0
       SW    20.0                                        2   20.0      .9
      WSW                                                0    0.0
        W                                                0    0.0
      WNW                                                0    0.0
       NW          10.0                                  1   10.0     3.0
      NNW    10.0                                        1   10.0      .5

     CALM                                                0    0.0

COL. TOTALS  50.0  30.0  20.0                           10            3.0
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             FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
100 METER LEVEL WINDS MORNING          JULY,1978
DIRECTION    ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW SUMMARY
              TO    TO    TO    TO    TO     THAN    TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N    16.6   8.3                                  3   24.9     2.8
      NNE     8.3   8.3  16.6                            4   33.2     5.5
       NE           8.3                                  1    8.3     5.6
      ENE                                                0    0.0
        E                                                0    0.0
      ESE                                                0    0.0
       SE     8.3                                        1    8.3     1.1
      SSE           8.3                                  1    8.3     5.5
        S                                                0    0.0
      SSW                                                0    0.0
       SW                                                0    0.0
      WSW                                                0    0.0
        W     8.3                                        1    8.3      .1
      WNW                                                0    0.0
       NW                                                0    0.0
      NNW           8.3                                  1    8.3     5.0

     CALM                                                0    0.0

COL. TOTALS  41.5  41.5  16.6                           12            4.0
100 METER LEVEL WINDS AFTERNOON        JULY,1978
DIRECTION    ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW SUMMARY
              TO    TO    TO    TO    TO     THAN    TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N                                                0    0.0
      NNE                                                0    0.0
       NE                                                0    0.0
      ENE                                                0    0.0
        E                                                0    0.0
      ESE                                                0    0.0
       SE          10.0                                  1   10.0     4.3
      SSE    20.0  10.0  10.0                            4   40.0     3.8
        S          10.0                                  1   10.0     5.4
      SSW                                                0    0.0
       SW    10.0        10.0                            2   20.0     5.6
      WSW                                                0    0.0
        W                                                0    0.0
      WNW                                                0    0.0
       NW    10.0                                        1   10.0     1.5
      NNW          10.0                                  1   10.0     4.4

     CALM                                                0    0.0

COL. TOTALS  40.0  40.0  20.0                           10            4.2
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
200 METER LEVEL WINDS MORNING          JULY,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT PERCENT  SPEED

        N     16.6   8.3                                    3    24.9     2.6
      NNE                        8.3                        1     8.3    10.6
       NE     16.6  16.6                                    4    33.2     3.4
      ENE                                                   0     0.0
        E      8.3                                          1     8.3     1.2
      ESE                                                   0     0.0
       SE                                                   0     0.0
      SSE                  8.3                              1     8.3     7.7
        S      8.3                                          1     8.3     1.2
      SSW      8.3                                          1     8.3     1.7
       SW                                                   0     0.0
      WSW                                                   0     0.0
        W                                                   0     0.0
      WNW                                                   0     0.0
       NW                                                   0     0.0
      NNW                                                   0     0.0

     CALM                                                   0     0.0

COL. TOTALS   58.1  24.9   8.3   8.3                       12             3.6
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200 METER LEVEL WINDS AFTERNOON          JULY,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT PERCENT  SPEED

        N                                                   0     0.0
      NNE                                                   0     0.0
       NE                                                   0     0.0
      ENE                                                   0     0.0
        E                                                   0     0.0
      ESE     10.0                                          1    10.0     1.1
       SE           10.0                                    1    10.0     4.0
      SSE     10.0  10.0  20.0                              4    40.0     5.1
        S                                                   0     0.0
      SSW                                                   0     0.0
       SW           10.0        10.0                        2    20.0     7.6
      WSW                                                   0     0.0
        W                                                   0     0.0
      WNW                                                   0     0.0
       NW           10.0                                    1    10.0     3.3
      NNW                 10.0                              1    10.0     8.4

     CALM                                                   0     0.0

COL. TOTALS   20.0  40.0  30.0  10.0                       10             5.2
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
300 METER LEVEL WINDS MORNING          JULY,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT PERCENT  SPEED

        N      8.3         8.3                              2    16.6     3.8
      NNE           16.6        8.3                         3    24.9     8.1
       NE      8.3                                          1     8.3     2.5
      ENE            8.3                                    1     8.3     3.1
        E                                                   0     0.0
      ESE      8.3                                          1     8.3     1.1
       SE                                                   0     0.0
      SSE                  8.3                              1     8.3     7.6
        S           16.6                                    2    16.6     5.4
      SSW                                                   0     0.0
       SW                                                   0     0.0
      WSW                                                   0     0.0
        W                                                   0     0.0
      WNW                                                   0     0.0
       NW      8.3                                          1     8.3     1.5
      NNW                                                   0     0.0

     CALM                                                   0     0.0

COL. TOTALS   33.2  41.5  16.6   8.3                       12             4.6
```

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300 METER LEVEL WINDS AFTERNOON          JULY,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT PERCENT  SPEED

        N                                                   0     0.0
      NNE                                                   0     0.0
       NE                                                   0     0.0
      ENE                                                   0     0.0
        E                                                   0     0.0
      ESE                                                   0     0.0
       SE     10.0                                          1    10.0     1.9
      SSE           20.0  30.0                              5    50.0     5.9
        S                                                   0     0.0
      SSW                                                   0     0.0
       SW     10.0                                          1    10.0     2.8
      WSW                 10.0                              1    10.0     6.0
        W                                                   0     0.0
      WNW                                                   0     0.0
       NW           10.0        10.0                        2    20.0     7.0
      NNW                                                   0     0.0

     CALM                                                   0     0.0

COL. TOTALS   20.0  30.0  40.0  10.0                       10             5.4
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING JULY,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND **************************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	8.3						1	8.3	2.9
NNE			8.3				1	8.3	9.5
NE	8.3						1	8.3	1.9
ENE	8.3						1	8.3	.4
E	8.3		8.3				2	16.6	3.8
ESE							0	0.0	
SE		8.3					1	8.3	3.5
SSE		8.3	16.6				3	24.9	6.7
S			8.3				1	8.3	6.8
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W	8.3						1	8.3	1.7
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	41.5	16.6	41.5				12		4.5

500 METER LEVEL WINDS AFTERNOON JULY,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND **************************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	10.0	10.0	20.0	10.0			5	50.0	6.3
S							0	0.0	
SSW	10.0						1	10.0	1.7
SW	10.0		10.0				2	20.0	4.7
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW				10.0			1	10.0	12.7
NNW		10.0					1	10.0	3.9
CALM							0	0.0	
COL. TOTALS	30.0	20.0	30.0	20.0			10		5.9

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING JULY,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND **************************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	9.0						1	9.0	2.8
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	9.0						1	9.0	2.7
SE		9.0	9.0				2	18.0	6.0
SSE	9.0	9.0	18.1				4	36.1	5.2
S	18.1						2	18.1	1.7
SSW			9.0				1	9.0	6.1
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.1	18.0	36.1				11		4.3

750 METER LEVEL WINDS AFTERNOON JULY,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND **************************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		10.0					1	10.0	4.0
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		10.0					1	10.0	3.3
S	10.0	10.0	10.0				3	30.0	3.8
SSW		20.0					2	20.0	3.8
SW	10.0						1	10.0	2.3
WSW	20.0						2	20.0	2.4
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	40.0	50.0	10.0				10		3.3

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING JULY,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********							**************************	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	9.0						1	9.0	2.1
ENE							0	0.0	
E		9.0					1	9.0	3.5
ESE	9.0		9.0				2	18.0	4.9
SE			18.1				2	18.1	6.7
SSE		18.1					2	18.1	4.7
S		9.0		9.0			2	18.0	6.9
SSW							0	0.0	
SW	9.0						1	9.0	1.2
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW									
CALM							0	0.0	
COL. TOTALS	27.0	36.1	27.1	9.0			11		4.8

1000 METER LEVEL WINDS AFTERNOON JULY,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********							**************************	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	10.0						1	10.0	1.6
NE	10.0						1	10.0	1.6
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S	10.0		10.0				2	20.0	4.9
SSW	10.0	10.0					2	20.0	3.1
SW		10.0					1	10.0	3.3
WSW	10.0	10.0	10.0				3	30.0	4.9
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	50.0	30.0	20.0				10		3.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING JULY,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********							**************************	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	12.5						1	12.5	2.1
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E	12.5						1	12.5	1.1
ESE		12.5					1	12.5	5.0
SE							0	0.0	
SSE							0	0.0	
S		25.0					2	25.0	4.4
SSW		12.5	12.5				2	25.0	5.9
SW							0	0.0	
WSW				12.5			1	12.5	11.5
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	25.0	50.0	12.5	12.5			8		5.0

1500 METER LEVEL WINDS AFTERNOON JULY,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********							**************************	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	14.2						1	14.2	.2
NE							0	0.0	
ENE	14.2						1	14.2	1.9
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE				14.2			1	14.2	10.0
S							0	0.0	
SSW							0	0.0	
SW			14.2				1	14.2	7.2
WSW			14.2	14.2			2	28.4	9.6
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW			14.2				1	14.2	6.6
CALM							0	0.0	
COL. TOTALS	28.4		42.6	28.4			7		6.4

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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING         JULY,1978
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N           16.6                                  1    16.6     3.6
      NNE                                                 0     0.0
       NE                                                 0     0.0
      ENE                                                 0     0.0
        E                                                 0     0.0
      ESE                 16.6                            1    16.6     8.0
       SE                                                 0     0.0
      SSE                                                 0     0.0
        S     16.6                                        1    16.6     2.6
      SSW                                                 0     0.0
       SW                                                 0     0.0
      WSW     16.6              16.6                      2    33.2     8.4
        W           16.6                                  1    16.6     4.3
      WNW                                                 0     0.0
       NW                                                 0     0.0
      NNW                                                 0     0.0

    CALM                                                  0     0.0

COL. TOTALS   33.2  33.2  16.6  16.6                      6             5.8
2000 METER LEVEL WINDS AFTERNOON       JULY,1978
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N                                                 0     0.0
      NNE                                                 0     0.0
       NE                                                 0     0.0
      ENE                                                 0     0.0
        E                                                 0     0.0
      ESE                                                 0     0.0
       SE           20.0                                  1    20.0     3.5
      SSE           20.0                                  1    20.0     3.9
        S     20.0                                        1    20.0     1.5
      SSW                                                 0     0.0
       SW                                                 0     0.0
      WSW                             20.0                1    20.0    16.7
        W                                                 0     0.0
      WNW                                                 0     0.0
       NW                 20.0                            1    20.0     6.7
      NNW                                                 0     0.0

    CALM                                                  0     0.0

COL. TOTALS   20.0  40.0  20.0        20.0                5             6.4
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING AUGUST,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	33.3						4	33.3	.9
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE		8.3					1	8.3	3.1
SE							0	0.0	
SSE	8.3						1	8.3	2.2
S	8.3						1	8.3	1.3
SSW							0	0.0	
SW	8.3						1	8.3	2.2
WSW	16.6						2	16.6	.4
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	16.6						2	16.6	.6
CALM							0	0.0	
COL. TOTALS	91.4	8.3					12		1.2

SURFACE WINDS AFTERNOON AUGUST,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	15.3						2	15.3	1.3
SE							0	0.0	
SSE	7.6	15.3					3	22.9	3.9
S	15.3						2	15.3	1.7
SSW		15.3					2	15.3	3.8
SW		7.6					1	7.6	3.1
WSW							0	0.0	
W		7.6					1	7.6	4.5
WNW							0	0.0	
NW	7.6						1	7.6	2.2
NNW	7.6						1	7.6	1.0
CALM							0	0.0	
COL. TOTALS	53.4	45.8					13		2.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING AUGUST,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N			16.6				2	16.6	6.9
NNE	8.3	8.3	8.3				3	24.9	4.7
NE		8.3	8.3				2	16.6	7.0
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		8.3					1	8.3	5.6
S		8.3					1	8.3	4.0
SSW	8.3						1	8.3	2.3
SW		8.3					1	8.3	4.2
WSW							0	0.0	
W	8.3						1	8.3	2.0
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	24.9	41.5	33.2				12		5.0

100 METER LEVEL WINDS AFTERNOON AUGUST,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	7.6						1	7.6	1.5
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	15.3						2	15.3	1.3
SE							0	0.0	
SSE	7.6	7.6					2	15.2	3.4
S	15.3	7.6					3	22.9	2.6
SSW		7.6	7.6				2	15.2	6.1
SW		7.6					1	7.6	3.9
WSW							0	0.0	
W	7.6		7.6				2	15.2	5.4
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	53.4	30.4	15.2				13		3.5

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                FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 200 METER LEVEL WINDS MORNING        AUGUST,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
                00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                  TO    TO    TO    TO    TO     THAN    TOTAL    TOTAL  AVERAGE
                02.9  05.9  09.9  15.9  25.0     25.0    COUNT  PERCENT    SPEED

           N          16.6                                   2     16.6      5.4
         NNE     8.3        16.6                             3     24.9      5.9
          NE           8.3                                   1      8.3      3.4
         ENE                                                 0      0.0
           E                                                 0      0.0
         ESE                                                 0      0.0
          SE                                                 0      0.0
         SSE                 8.3                             1      8.3      8.1
           S           8.3                                   1      8.3      4.2
         SSW           8.3                                   1      8.3      4.8
          SW           8.3                                   1      8.3      3.8
         WSW     8.3                                         1      8.3      2.9
           W                                                 0      0.0
         WNW                                                 0      0.0
          NW                                                 0      0.0
         NNW     8.3                                         1      8.3      2.3

        CALM                                                 0      0.0

 COL. TOTALS    24.9  49.8  24.9                            12               4.8
 200 METER LEVEL WINDS AFTERNOON      AUGUST,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
                00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                  TO    TO    TO    TO    TO     THAN    TOTAL    TOTAL  AVERAGE
                02.9  05.9  09.9  15.9  25.0     25.0    COUNT  PERCENT    SPEED

           N                                                 0      0.0
         NNE                                                 0      0.0
          NE                                                 0      0.0
         ENE     7.6                                         1      7.6      1.1
           E     7.6                                         1      7.6       .6
         ESE                                                 0      0.0
          SE     7.6                                         1      7.6      1.6
         SSE    15.3                                         2     15.3      1.7
           S           7.6                                   1      7.6      3.9
         SSW          15.3               7.6                 3     22.9      7.9
          SW                 7.6                             1      7.6      6.9
         WSW                                                 0      0.0
           W           7.6   7.6                             2     15.2      6.2
         WNW                                                 0      0.0
          NW                                                 0      0.0
         NNW     7.6                                         1      7.6      1.3

        CALM                                                 0      0.0

 COL. TOTALS    45.7  30.5  15.2         7.6                13               4.2
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                FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 300 METER LEVEL WINDS MORNING        AUGUST,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
                00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                  TO    TO    TO    TO    TO     THAN    TOTAL    TOTAL  AVERAGE
                02.9  05.9  09.9  15.9  25.0     25.0    COUNT  PERCENT    SPEED

           N     8.3                                         1      8.3      2.9
         NNE                 8.3                             1      8.3      8.5
          NE     8.3  16.6                                   3     24.9      3.8
         ENE     8.3                                         1      8.3      1.6
           E                                                 0      0.0
         ESE                                                 0      0.0
          SE                                                 0      0.0
         SSE                                                 0      0.0
           S                 8.3                             1      8.3      9.1
         SSW          25.0                                   3     25.0      3.9
          SW           8.3                                   1      8.3      5.7
         WSW     8.3                                         1      8.3      2.1
           W                                                 0      0.0
         WNW                                                 0      0.0
          NW                                                 0      0.0
         NNW                                                 0      0.0

        CALM                                                 0      0.0

 COL. TOTALS    33.2  49.9  16.6                            12               4.4
 300 METER LEVEL WINDS AFTERNOON      AUGUST,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
                00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                  TO    TO    TO    TO    TO     THAN    TOTAL    TOTAL  AVERAGE
                02.9  05.9  09.9  15.9  25.0     25.0    COUNT  PERCENT    SPEED

           N                                                 0      0.0
         NNE           7.6                                   1      7.6      5.8
          NE                                                 0      0.0
         ENE                                                 0      0.0
           E     7.6                                         1      7.6       .6
         ESE                                                 0      0.0
          SE     7.6                                         1      7.6      2.2
         SSE     7.6                                         1      7.6      1.8
           S     7.6   7.6                                   2     15.2      2.6
         SSW           7.6   7.6   7.6                       3     22.8      7.6
          SW                 7.6                             1      7.6      6.9
         WSW                                                 0      0.0
           W     7.6   7.6         7.6                       3     22.8      7.0
         WNW                                                 0      0.0
          NW                                                 0      0.0
         NNW                                                 0      0.0

        CALM                                                 0      0.0

 COL. TOTALS    38.0  30.4  15.2  15.2                      13               5.1
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
500 METER LEVEL WINDS MORNING      AUGUST,1978
 DIRECTION ********* WIND SPEEDS METERS/SECOND ****************************
            00.1  03.0  06.0  10.0  16.0 GREATER    ROW SUMMARY
             TO    TO    TO    TO    TO   THAN    TOTAL  TOTAL   AVERAGE
            02.9  05.9  09.9  15.9  25.0  25.0    COUNT PERCENT    SPEED

         N   9.0         9.0                          2   18.0       4.2
       NNE                                            0    0.0
        NE                                            0    0.0
       ENE   9.0                                      1    9.0       2.6
         E   9.0                                      1    9.0       1.3
       ESE                                            0    0.0
        SE                                            0    0.0
       SSE   9.0                                      1    9.0       2.5
         S                     9.0                    1    9.0      13.6
       SSW   9.0   9.0   9.0                          3   27.0       4.1
        SW         9.0   9.0                          2   18.0       7.0
       WSW                                            0    0.0
         W                                            0    0.0
       WNW                                            0    0.0
        NW                                            0    0.0
       NNW                                            0    0.0

      CALM                                            0    0.0

COL. TOTALS 45.0  18.0  27.0   9.0                   11              5.0
500 METER LEVEL WINDS AFTERNOON    AUGUST,1978
 DIRECTION ********* WIND SPEEDS METERS/SECOND ****************************
            00.1  03.0  06.0  10.0  16.0 GREATER    ROW SUMMARY
             TO    TO    TO    TO    TO   THAN    TOTAL  TOTAL   AVERAGE
            02.9  05.9  09.9  15.9  25.0  25.0    COUNT PERCENT    SPEED

         N                                            0    0.0
       NNE                                            0    0.0
        NE                                            0    0.0
       ENE                                            0    0.0
         E                                            0    0.0
       ESE                                            0    0.0
        SE   7.6                                      1    7.6       1.9
       SSE                                            0    0.0
         S         7.6                                1    7.6       3.2
       SSW   7.6  15.3                                3   22.9       3.6
        SW         7.6  15.3                          3   22.9       6.2
       WSW                                            0    0.0
         W   7.6   7.6         7.6                    3   22.8       4.8
       WNW   7.6                                      1    7.6        .9
        NW   7.6                                      1    7.6       1.3
       NNW                                            0    0.0

      CALM                                            0    0.0

COL. TOTALS 38.0  38.1  15.3   7.6                   13              3.9
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```
          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
750 METER LEVEL WINDS MORNING      AUGUST,1978
 DIRECTION ********* WIND SPEEDS METERS/SECOND ****************************
            00.1  03.0  06.0  10.0  16.0 GREATER    ROW SUMMARY
             TO    TO    TO    TO    TO   THAN    TOTAL  TOTAL   AVERAGE
            02.9  05.9  09.9  15.9  25.0  25.0    COUNT PERCENT    SPEED

         N                                            0    0.0
       NNE                                            0    0.0
        NE   9.0                                      1    9.0       2.8
       ENE                                            0    0.0
         E   9.0                                      1    9.0       2.9
       ESE                                            0    0.0
        SE               9.0                          1    9.0       7.4
       SSE                                            0    0.0
         S         9.0                                1    9.0       4.4
       SSW  18.1         9.0                          3   27.1       3.1
        SW               9.0         9.0              2   18.0      12.9
       WSW         9.0                                1    9.0       3.1
         W                                            0    0.0
       WNW                                            0    0.0
        NW   9.0                                      1    9.0       2.3
       NNW                                            0    0.0

      CALM                                            0    0.0

COL. TOTALS 45.1  18.0  27.0         9.0             11              5.2
750 METER LEVEL WINDS AFTERNOON    AUGUST,1978
 DIRECTION ********* WIND SPEEDS METERS/SECOND ****************************
            00.1  03.0  06.0  10.0  16.0 GREATER    ROW SUMMARY
             TO    TO    TO    TO    TO   THAN    TOTAL  TOTAL   AVERAGE
            02.9  05.9  09.9  15.9  25.0  25.0    COUNT PERCENT    SPEED

         N                                            0    0.0
       NNE                                            0    0.0
        NE                                            0    0.0
       ENE                                            0    0.0
         E                                            0    0.0
       ESE                                            0    0.0
        SE                                            0    0.0
       SSE  15.3                                      2   15.3       1.5
         S         7.6                                1    7.6       3.1
       SSW               7.6                          1    7.6       9.2
        SW   7.6   7.6  15.3                          4   30.5       5.2
       WSW  15.3   7.6                                3   22.9       2.4
         W         7.6         7.6                    2   15.2       9.0
       WNW                                            0    0.0
        NW                                            0    0.0
       NNW                                            0    0.0

      CALM                                            0    0.0

COL. TOTALS 38.2  30.4  22.9   7.6                   13              4.7
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING AUGUST,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE	10.0						1	10.0	1.2
NE							0	0.0	
ENE							0	0.0	
E					10.0		1	10.0	19.0
ESE		10.0					1	10.0	3.5
SE							0	0.0	
SSE	10.0						1	10.0	1.4
S				10.0			1	10.0	12.4
SSW			10.0				1	10.0	6.1
SW					10.0		1	10.0	16.4
WSW		10.0	10.0				2	20.0	6.3
W	10.0						1	10.0	1.7
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	30.0	20.0	20.0	10.0	20.0		10		7.4

1000 METER LEVEL WINDS AFTERNOON AUGUST,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE					9.0		1	9.0	19.2
ENE			9.0				1	9.0	7.3
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW		9.0					1	9.0	5.4
SW	9.0		9.0				2	18.0	5.2
WSW	9.0		9.0				2	18.0	4.3
W	9.0						1	9.0	.8
WNW							0	0.0	
NW	18.1						2	18.1	1.0
NNW	9.0						1	9.0	1.9
CALM							0	0.0	
COL. TOTALS	54.1	9.0	27.0		9.0		11		5.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING AUGUST,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		12.5					1	12.5	5.8
SSE							0	0.0	
S	12.5						1	12.5	1.5
SSW							0	0.0	
SW						12.5	1	12.5	37.4
WSW							0	0.0	
W	12.5						1	12.5	2.9
WNW			12.5	12.5			2	25.0	8.4
NW	12.5		12.5				2	25.0	5.4
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	37.5	12.5	25.0	12.5		12.5	8		9.4

1500 METER LEVEL WINDS AFTERNOON AUGUST,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	14.2						1	14.2	2.2
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW			14.2				1	14.2	7.7
SW	14.2						1	14.2	1.4
WSW							0	0.0	
W		14.2	14.2	14.2			3	42.6	8.2
WNW							0	0.0	
NW		14.2					1	14.2	4.2
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	28.4	28.4	28.4	14.2			7		5.7

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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LCCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING       AUGUST,1978
  DIRECTION  ********* WIND SPEEDS METERS/SECCND *************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    IC    IC    THAN      TOTAL   TCTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      CCUNT  PERCENT  SPEED

          N                                               0     C.0
        NNE                                               0     0.0
         NE                                               0     0.0
        ENE                                               C     C.C
          E                                               0     0.0
        ESE                                               0     0.0
         SE                                               0     0.0
        SSE         16.6                                  1    16.6      4.6
          S                                               0     0.0
        SSW                                               0     C.0
         SW                                               0     0.0
        WSW                                               0     0.0
          W               16.6                            1    16.6      8.4
        WNW         16.6                                  1    16.6      4.8
         NW         33.3        16.6                      3    49.5      7.8
        NNW                                               0     0.0

       CALM                                               0     0.0

COL. TCTALS         66.5  16.6  16.6                      6              6.8
2000 METER LEVEL WINDS AFTERNOON     AUGUST,1978
  DIRECTION  ********* WINC SPEEDS METERS/SECCND *************************
              00.1  03.0  06.0  10.C  16.0  GREATER      RCW  SUMMARY
               TO    TO    TO    TC    TO    THAN      TOTAL   ICTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      CCUNT  PERCENT  SPEED

          N                                               0     0.0
        NNE                                               0     0.0
         NE                                               0     0.0
        ENE                                 20.0          1    20.0     26.C
          E                                               0     0.0
        ESE                                               0     0.0
         SE                                               0     0.0
        SSE                                               0     0.0
          S   20.0                                        1    20.0      2.7
        SSW                                               0     0.0
         SW                                               0     0.0
        WSW                                               0     0.0
          W         20.0                                  1    20.0      5.0
        WNW         20.0                                  1    20.0      5.9
         NW   20.0                                        1    20.0      1.0
        NNW                                               0     0.0

       CALM                                               0     0.0

COL. TCTALS   40.0  40.0                    20.0          5              8.1
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                    FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
         SURFACE WINDS MORNING   SEPTEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER        ROW   SUMMARY
              TO    TO    TO    TO    TO     THAN       TOTAL   TOTAL   AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0       COUNT  PERCENT   SPEED

     N       11.1  11.1                                    2     22.2      3.0
   NNE                                                     0      0.0
    NE                                                     0      0.0
   ENE                                                     0      0.0
     E                                                     0      0.0
   ESE                                                     0      0.0
    SE                                                     0      0.0
   SSE       11.1                                          1     11.1      2.2
     S       11.1  11.1                                    2     22.2      2.7
   SSW                                                     0      0.0
    SW       11.1                                          1     11.1       .4
   WSW       11.1                                          1     11.1       .4
     W                                                     0      0.0
   WNW       11.1                                          1     11.1       .9
    NW                                                     0      0.0
   NNW       11.1                                          1     11.1       .7

  CALM                                                     0      0.0

COL. TOTALS  77.7  22.2                                    9               1.7
         SURFACE WINDS AFTERNOON SEPTEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER        ROW   SUMMARY
              TO    TO    TO    TO    TO     THAN       TOTAL   TOTAL   AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0       COUNT  PERCENT   SPEED

     N                                                     0      0.0
   NNE                                                     0      0.0
    NE                   12.5                              1     12.5      6.7
   ENE                                                     0      0.0
     E             12.5                                    1     12.5      4.5
   ESE                                                     0      0.0
    SE                                                     0      0.0
   SSE             12.5                                    1     12.5      3.1
     S             25.0                                    2     25.0      4.2
   SSW                                                     0      0.0
    SW                   12.5                              1     12.5      6.7
   WSW       12.5        12.5                              2     25.0      5.6
     W                                                     0      0.0
   WNW                                                     0      0.0
    NW                                                     0      0.0
   NNW                                                     0      0.0

  CALM                                                     0      0.0

COL. TOTALS  12.5  50.0  37.5                              8               5.0
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                    FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
100 METER LEVEL WINDS MORNING   SEPTEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER        ROW   SUMMARY
              TO    TO    TO    TO    TO     THAN       TOTAL   TOTAL   AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0       COUNT  PERCENT   SPEED

     N       11.1              11.1                        2     22.2      6.2
   NNE             11.1                                    1     11.1      4.9
    NE       11.1                                          1     11.1      2.8
   ENE       22.2                                          2     22.2      1.9
     E                                                     0      0.0
   ESE                                                     0      0.0
    SE                                                     0      0.0
   SSE                                                     0      0.0
     S                   11.1                              1     11.1      9.2
   SSW             22.2                                    2     22.2      3.7
    SW                                                     0      0.0
   WSW                                                     0      0.0
     W                                                     0      0.0
   WNW                                                     0      0.0
    NW                                                     0      0.0
   NNW                                                     0      0.0

  CALM                                                     0      0.0

COL. TOTALS  44.4  33.3  11.1  11.1                        9               4.5
100 METER LEVEL WINDS AFTERNOON SEPTEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER        ROW   SUMMARY
              TO    TO    TO    TO    TO     THAN       TOTAL   TOTAL   AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0       COUNT  PERCENT   SPEED

     N                                                     0      0.0
   NNE                                                     0      0.0
    NE                         12.5                        1     12.5     11.7
   ENE                                                     0      0.0
     E                                                     0      0.0
   ESE                                                     0      0.0
    SE                                                     0      0.0
   SSE       12.5        12.5                              2     25.0      4.1
     S             12.5                                    1     12.5      3.2
   SSW                               12.5                  1     12.5     16.3
    SW                                                     0      0.0
   WSW       12.5        25.0                              3     37.5      5.8
     W                                                     0      0.0
   WNW                                                     0      0.0
    NW                                                     0      0.0
   NNW                                                     0      0.0

  CALM                                                     0      0.0

COL. TOTALS  25.0  12.5  37.5  12.5  12.5                  8               7.1
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING SEPTEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		11.1	11.1				2	22.2	6.9
NE		11.1	11.1				2	22.2	6.8
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		11.1					1	11.1	3.2
S							0	0.0	
SSW				11.1			1	11.1	10.2
SW			11.1				1	11.1	8.9
WSW	11.1	11.1					2	22.2	3.1
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	44.4	33.3	11.1			9		6.2

200 METER LEVEL WINDS AFTERNOON SEPTEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE				12.5			1	12.5	11.8
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			12.5				1	12.5	6.3
S		12.5	12.5				2	25.0	5.7
SSW	12.5						1	12.5	2.1
SW							0	0.0	
WSW	12.5		12.5	12.5			3	37.5	7.4
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	25.0	12.5	37.5	25.0			8		6.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING SEPTEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			11.1				1	11.1	8.7
NE		11.1					1	11.1	4.7
ENE		11.1					1	11.1	4.3
E							0	0.0	
ESE	11.1						1	11.1	2.4
SE							0	0.0	
SSE		11.1					1	11.1	5.9
S							0	0.0	
SSW				11.1			1	11.1	10.9
SW	11.1			11.1			2	22.2	6.1
WSW							0	0.0	
W	11.1						1	11.1	2.6
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	33.3	33.3	11.1	22.2			9		5.7

300 METER LEVEL WINDS AFTERNOON SEPTEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE				12.5			1	12.5	10.0
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S		12.5	25.0				3	37.5	6.3
SSW							0	0.0	
SW							0	0.0	
WSW	12.5	12.5		12.5			3	37.5	7.6
W		12.5					1	12.5	4.2
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	12.5	37.5	25.0	25.0			8		7.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING SEPTEMBER,1978

DIRECTION	********* WIND SPEEDS 00.1 TO 02.9	METERS/SECOND 03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0 *********	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			11.1				1	11.1	9.3
NE							0	0.0	
ENE							0	0.0	
E	22.2						2	22.2	1.8
ESE							0	0.0	
SE							0	0.0	
SSE			11.1				1	11.1	9.1
S			11.1				1	11.1	6.3
SSW		11.1					1	11.1	4.0
SW			11.1	11.1			2	22.2	9.3
WSW							0	0.0	
W		11.1					1	11.1	3.2
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	22.2	22.2	44.4	11.1			9		6.0

500 METER LEVEL WINDS AFTERNOON SEPTEMBER,1978

DIRECTION	********* WIND SPEEDS 00.1 TO 02.9	METERS/SECOND 03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0 *********	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			12.5				1	12.5	9.7
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S		12.5	12.5				2	25.0	6.2
SSW			12.5				1	12.5	7.2
SW							0	0.0	
WSW		12.5		12.5	12.5		3	37.5	10.6
W		12.5					1	12.5	4.8
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		37.5	37.5	12.5	12.5		8		8.2

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING SEPTEMBER,1978

DIRECTION	********* WIND SPEEDS 00.1 TO 02.9	METERS/SECOND 03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0 *********	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			11.1				1	11.1	6.0
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		22.2	11.1				3	33.3	5.7
S							0	0.0	
SSW			11.1				1	11.1	9.9
SW			11.1	11.1	11.1		3	33.3	14.0
WSW							0	0.0	
W							0	0.0	
WNW		11.1					1	11.1	3.4
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		33.3	44.4	11.1	11.1		9		8.7

750 METER LEVEL WINDS AFTERNOON SEPTEMBER,1978

DIRECTION	********* WIND SPEEDS 00.1 TO 02.9	METERS/SECOND 03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0 *********	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE				14.2			1	14.2	12.2
NE							0	0.0	
ENE							0	0.0	
E		14.2					1	14.2	4.2
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW		14.2					1	14.2	5.8
SW			14.2				1	14.2	9.0
WSW					14.2		1	14.2	19.7
W	14.2						1	14.2	2.5
WNW				14.2			1	14.2	10.8
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	14.2	28.4	14.2	28.4	14.2		7		9.1

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING SEPTEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			11.1				1	11.1	7.4
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		11.1					1	11.1	4.8
S							0	0.0	
SSW							0	0.0	
SW			11.1	11.1	11.1	11.1	4	44.4	16.1
WSW			11.1				1	11.1	6.2
W	11.1						1	11.1	1.6
WNW			11.1				1	11.1	7.2
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	11.1	44.4	11.1	11.1	11.1	9		10.1

1000 METER LEVEL WINDS AFTERNOON SEPTEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N			16.6				1	16.6	8.8
NNE						16.6	1	16.6	29.3
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S			16.6				1	16.6	6.6
SSW							0	0.0	
SW		16.6					1	16.6	5.1
WSW							0	0.0	
W		16.6					1	16.6	3.2
WNW				16.6			1	16.6	10.5
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		33.2	33.2	16.6		16.6	6		10.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING SEPTEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE					14.2		1	14.2	17.3
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S			14.2				1	14.2	6.6
SSW							0	0.0	
SW		14.2		14.2			2	28.4	9.9
WSW		14.2					1	14.2	4.4
W							0	0.0	
WNW		14.2			14.2		2	28.4	10.8
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		42.6	14.2	14.2	28.4		7		9.9

1500 METER LEVEL WINDS AFTERNOON SEPTEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N				50.0			1	50.0	10.5
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW				50.0			1	50.0	10.6
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS				100.0			2		10.5

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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING   SEPTEMBER,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.5  25.0   25.0     COUNT  PERCENT  SPEED

      N                                                 0     0.0
    NNE                                                 0     0.0
     NE                                                 0     0.0
    ENE                                                 0     0.0
      E                                                 0     0.0
    ESE                   25.0                          1    25.0      6.0
     SE                                                 0     0.0
    SSE                                                 0     0.0
      S                                                 0     0.0
    SSW                                                 0     0.0
     SW                                                 0     0.0
    WSW                   50.0  25.0                    3    75.0      9.2
      W                                                 0     0.0
    WNW                                                 0     0.0
     NW                                                 0     0.0
    NNW                                                 0     0.0

   CALM                                                 0     0.0

COL. TOTALS               75.0  25.0                    4              8.4
2000 METER LEVEL WINDS AFTERNOON SEPTEMBER,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N                         100.0                   1   100.0     10.8
    NNE                                                 0     0.0
     NE                                                 0     0.0
    ENE                                                 0     0.0
      E                                                 0     0.0
    ESE                                                 0     0.0
     SE                                                 0     0.0
    SSE                                                 0     0.0
      S                                                 0     0.0
    SSW                                                 0     0.0
     SW                                                 0     0.0
    WSW                                                 0     0.0
      W                                                 0     0.0
    WNW                                                 0     0.0
     NW                                                 0     0.0
    NNW                                                 0     0.0

   CALM                                                 0     0.0

COL. TOTALS                     100.0                   1             10.8
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING   OCTOBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	12.5						2	12.5	.8
NNE	25.0						4	25.0	1.1
NE	6.2						1	6.2	.4
ENE	6.2						1	6.2	1.8
E	6.2						1	6.2	1.3
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S		6.2					1	6.2	5.4
SSW		6.2					1	6.2	3.3
SW	12.5						2	12.5	.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW	6.2						1	6.2	2.2
NNW	6.2						1	6.2	.7
CALM							1	6.0	
COL. TOTALS	81.0	12.4					16		1.4

SURFACE WINDS AFTERNOON   OCTOBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	8.3						1	8.3	2.9
NE							0	0.0	
ENE	8.3						1	8.3	.7
E							0	0.0	
ESE							0	0.0	
SE	8.3						1	8.3	2.7
SSE	16.6	25.0					5	41.6	2.7
S	8.3						1	8.3	2.9
SSW	25.0						3	25.0	1.8
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	74.8	25.0					12		2.3

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING   OCTOBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	18.7	18.7	6.2				7	43.6	3.5
NE		6.2					1	6.2	4.5
ENE	6.2						1	6.2	1.5
E							0	0.0	
ESE	6.2						1	6.2	1.0
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW			6.2				1	6.2	7.2
SW		6.2	6.2				2	12.4	5.4
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW	6.2						1	6.2	.1
NNW	6.2	6.2					2	12.4	3.3
CALM							0	0.0	
COL. TOTALS	43.5	37.3	18.6				16		3.5

100 METER LEVEL WINDS AFTERNOON   OCTOBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	8.3						1	8.3	1.4
E	8.3						1	8.3	.8
ESE							0	0.0	
SE	8.3						1	8.3	2.4
SSE	25.0	16.6					5	41.6	2.7
S	16.6						2	16.6	2.1
SSW	8.3	8.3					2	16.6	3.2
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	74.8	24.9					12		2.4

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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
200 METER LEVEL WINDS MORNING      OCTOBER,1978
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
             00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
              TO     TO     TO     TO     TO    THAN      TOTAL   TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0   25.0      COUNT  PERCENT  SPEED

         N           6.2   12.5                               3     18.7     6.0
       NNE           6.2    6.2                               2     12.4     4.7
        NE           6.2                                      1      6.2     4.5
       ENE    6.2                                             1      6.2      .9
         E    6.2                                             1      6.2     2.8
       ESE                                                    0      0.0
        SE    6.2                                             1      6.2     2.5
       SSE    6.2                                             1      6.2     1.7
         S           6.2                                      1      6.2     4.3
       SSW    6.2    6.2                                      2     12.4     3.1
        SW                  6.2    6.2                        2     12.4    12.1
       WSW                                                    0      0.0
         W                                                    0      0.0
       WNW                                                    0      0.0
        NW                                                    0      0.0
       NNW    6.2                                             1      6.2     2.0

    CALM                                                      0      0.0

COL. TOTALS  37.2   31.0   24.9    6.2                       16              4.7
200 METER LEVEL WINDS AFTERNOON   OCTOBER,1978
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
             00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
              TO     TO     TO     TO     TO    THAN      TOTAL   TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0   25.0      COUNT  PERCENT  SPEED

         N                                                    0      0.0
       NNE                                                    0      0.0
        NE                                                    0      0.0
       ENE   16.6                                             2     16.6     1.4
         E                                                    0      0.0
       ESE                                                    0      0.0
        SE                                                    0      0.0
       SSE   25.0    8.3                                      4     33.3     3.0
         S    8.3   25.0                                      4     33.3     3.7
       SSW    8.3    8.3                                      2     16.6     3.3
        SW                                                    0      0.0
       WSW                                                    0      0.0
         W                                                    0      0.0
       WNW                                                    0      0.0
        NW                                                    0      0.0
       NNW                                                    0      0.0

    CALM                                                      0      0.0

COL. TOTALS  58.2   41.6                                     12              3.0
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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
300 METER LEVEL WINDS MORNING      OCTOBER,1978
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
             00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
              TO     TO     TO     TO     TO    THAN      TOTAL   TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0   25.0      COUNT  PERCENT  SPEED

         N          12.5    6.2                               3     18.7     5.6
       NNE           6.2    6.2                               2     12.4     5.7
        NE           6.2                                      1      6.2     3.3
       ENE                                                    0      0.0
         E                                                    0      0.0
       ESE           6.2                                      1      6.2     3.9
        SE           6.2                                      1      6.2     5.5
       SSE           6.2    6.2                               2     12.4     5.9
         S          12.5                                      2     12.5     3.8
       SSW           6.2                                      1      6.2     3.9
        SW                         6.2                        1      6.2    15.0
       WSW                         6.2                        1      6.2    10.4
         W                                                    0      0.0
       WNW                                                    0      0.0
        NW                                                    0      0.0
       NNW           6.2                                      1      6.2     3.8

    CALM                                                      0      0.0

COL. TOTALS         68.4   18.6   12.4                       16              5.6
300 METER LEVEL WINDS AFTERNOON   OCTOBER,1978
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
             00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
              TO     TO     TO     TO     TO    THAN      TOTAL   TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0   25.0      COUNT  PERCENT  SPEED

         N                                                    0      0.0
       NNE                                                    0      0.0
        NE                                                    0      0.0
       ENE    8.3                                             1      8.3     1.1
         E                                                    0      0.0
       ESE                                                    0      0.0
        SE    8.3                                             1      8.3     1.5
       SSE          16.6                                      2     16.6     4.2
         S   33.3   16.6                                      6     49.9     2.3
       SSW                                                    0      0.0
        SW    8.3    8.3                                      2     16.6     3.3
       WSW                                                    0      0.0
         W                                                    0      0.0
       WNW                                                    0      0.0
        NW                                                    0      0.0
       NNW                                                    0      0.0

    CALM                                                      0      0.0

COL. TOTALS  58.2   41.5                                     12              2.7
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING OCTOBER,1976

DIRECTION	********* WIND SPEEDS METERS/SECOND	*********	*********	*********	*********	*********	*********	*********	*********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N			6.2				1	6.2	6.3
NNE			12.5				2	12.5	7.8
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE			6.2				1	6.2	7.0
SSE		6.2	18.7				4	24.9	6.9
S	6.2						1	6.2	2.8
SSW		6.2					1	6.2	5.5
SW						6.2	1	6.2	33.2
WSW	6.2						1	6.2	.7
W		6.2					1	6.2	5.4
WNW	6.2						1	6.2	2.7
NW							0	0.0	
NNW	6.2	6.2					2	12.4	2.9
CALM							0	0.0	
COL. TOTALS	24.8	24.8	43.6			6.2	16		7.0

500 METER LEVEL WINDS AFTERNOON OCTOBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND	*********	*********	*********	*********	*********	*********	*********	*********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	8.3						1	8.3	.9
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	8.3						1	8.3	1.0
SE							0	0.0	
SSE		16.6		8.3			3	24.9	6.8
S		16.6	16.6				4	33.2	6.2
SSW							0	0.0	
SW			8.3				1	8.3	6.9
WSW	8.3						1	8.3	1.5
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	8.3						1	8.3	.3
CALM							0	0.0	
COL. TOTALS	33.2	33.2	24.9	8.3			12		4.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING OCTOBER,1976

DIRECTION	********* WIND SPEEDS METERS/SECOND	*********	*********	*********	*********	*********	*********	*********	*********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		7.1					1	7.1	3.7
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E	7.1						1	7.1	1.9
ESE							0	0.0	
SE		7.1					1	7.1	5.1
SSE		14.2					2	14.2	5.2
S	7.1		7.1				2	14.2	4.5
SSW	7.1	14.2					3	21.3	3.9
SW		7.1					1	7.1	3.1
WSW		7.1					1	7.1	5.2
W							0	0.0	
WNW			7.1				1	7.1	6.9
NW			7.1				1	7.1	8.9
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	21.3	56.8	21.3				14		4.7

750 METER LEVEL WINDS AFTERNOON OCTOBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND	*********	*********	*********	*********	*********	*********	*********	*********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	16.6						2	16.6	1.6
SSE							0	0.0	
S		8.3	16.6				3	24.9	5.5
SSW	8.3	8.3	8.3				3	24.9	4.4
SW	8.3	8.3	8.3				3	24.9	4.4
WSW	8.3						1	8.3	1.6
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	41.5	24.9	33.2				12		4.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING   OCTOBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S	9.0	9.0					2	18.0	1.8
SSW	9.0	18.1					3	27.1	3.8
SW		9.0	9.0				2	18.0	5.8
WSW	9.0						1	9.0	1.8
W		9.0	9.0				2	18.0	4.7
WNW			9.0				1	9.0	6.5
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	45.1	27.0				11		4.0

1000 METER LEVEL WINDS AFTERNOON   OCTOBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N				8.3			1	8.3	12.6
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	8.3						1	8.3	2.4
SSE							0	0.0	
S			8.3				1	8.3	8.1
SSW				8.3			1	8.3	13.3
SW	8.3	8.3	16.6				4	33.2	5.7
WSW		8.3					1	8.3	4.5
W		16.6					2	16.6	5.3
WNW	8.3						1	8.3	.5
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	24.9	33.2	24.9	16.6			12		6.2

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING   OCTOBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S	11.1						1	11.1	2.6
SSW							0	0.0	
SW		11.1	11.1		11.1		3	33.3	9.6
WSW	11.1		11.1				2	22.2	3.6
W			11.1	11.1			2	22.2	8.3
WNW			11.1				1	11.1	7.9
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	22.2	11.1	44.4	11.1	11.1		9		7.0

1500 METER LEVEL WINDS AFTERNOON   OCTOBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW			11.1	11.1			2	22.2	10.4
W	11.1			11.1			2	22.2	6.1
WNW		11.1	44.4				5	55.5	7.6
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	11.1	55.5	22.2			9		7.9

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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING     OCTOBER,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

        N            28.5                                  2    28.5     3.3
      NNE                                                  0     0.0
       NE                                                  0     0.0
      ENE                                                  0     0.0
        E                                                  0     0.0
      ESE                                                  0     0.0
       SE                                                  0     0.0
      SSE                                                  0     0.0
        S                                                  0     0.0
      SSW                                                  0     0.0
       SW                                                  0     0.0
      WSW                                                  0     0.0
        W                  14.2  14.2                      2    28.4     9.5
      WNW                        14.2  14.2                2    28.4    13.3
       NW                  14.2                            1    14.2     7.6
      NNW                                                  0     0.0

     CALM                                                  0     0.0

COL. TOTALS          28.5  28.4  28.4  14.2                7             8.5
2000 METER LEVEL WINDS AFTERNOON   OCTOBER,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

        N                                                  0     0.0
      NNE                                                  0     0.0
       NE                                                  0     0.0
      ENE                                                  0     0.0
        E                                                  0     0.0
      ESE                                                  0     0.0
       SE                                                  0     0.0
      SSE                                                  0     0.0
        S                                                  0     0.0
      SSW                                                  0     0.0
       SW                                                  0     0.0
      WSW            12.5                                  1    12.5     5.5
        W                  12.5                            1    12.5     7.0
      WNW                        37.5                      3    37.5    12.8
       NW            12.5                                  1    12.5     5.4
      NNW                  25.0                            2    25.0     8.0

     CALM                                                  0     0.0

COL. TOTALS          25.0  37.5  37.5                      8             9.0
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING   NOVEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		8.3					1	8.3	3.6
NNE							0	0.0	
NE	8.3						1	8.3	1.4
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	8.3						1	8.3	1.8
SSE	8.3	16.6					3	24.9	4.2
S	8.3						1	8.3	.4
SSW		8.3					1	8.3	3.6
SW	8.3						1	8.3	.4
WSW							0	0.0	
W	8.3						1	8.3	1.1
WNW	8.3						1	8.3	.4
NW							0	0.0	
NNW	8.3						1	8.3	.7
CALM							0	0.0	
COL. TOTALS	66.4	33.2					12		2.1

SURFACE WINDS AFTERNOON NOVEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE		11.1					1	11.1	5.1
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	11.1	22.2					3	33.3	3.9
S	33.3	11.1					4	44.4	2.0
SSW							0	0.0	
SW							0	0.0	
WSW	11.1						1	11.1	.7
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	55.5	44.4					9		2.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING   NOVEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	8.3			8.3			2	16.6	6.2
NE	8.3						1	8.3	.3
ENE	8.3						1	8.3	1.8
E							0	0.0	
ESE							0	0.0	
SE	8.3						1	8.3	2.0
SSE		8.3	16.6				3	24.9	7.3
S							0	0.0	
SSW			8.3				1	8.3	6.1
SW							0	0.0	
WSW							0	0.0	
W		8.3					1	8.3	3.7
WNW							0	0.0	
NW							0	0.0	
NNW	8.3						1	8.3	2.1
CALM							1	8.0	
COL. TOTALS	41.5	16.6	24.9	8.3			12		4.2

100 METER LEVEL WINDS AFTERNOON NOVEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			11.1				1	11.1	7.1
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	44.4		11.1				5	55.5	2.6
S		11.1		11.1			2	22.2	9.0
SSW	11.1						1	11.1	.9
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	55.5	11.1	22.2	11.1			9		4.3

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             FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 200 METER LEVEL WINDS MORNING     NOVEMBER,1978
  DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TO    TC    TC    THAN     TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

        N                                              0      0.0
      NNE                8.3                           1      8.3      7.5
       NE    8.3                                       1      8.3       .8
      ENE    8.3                                       1      8.3      2.8
        E                                              0      0.0
      ESE                                              0      0.0
       SE    8.3                                       1      8.3       .3
      SSE    8.3               8.3                     2     16.6      6.3
        S    8.3  16.6         8.3                     4     33.2      5.5
      SSW                                              0      0.0
       SW          8.3                                 1      8.3      5.8
      WSW                                              0      0.0
        W    8.3                                       1      8.3      2.3
      WNW                                              0      0.0
       NW                                              0      0.0
      NNW                                              0      0.0

    CALM                                               0      0.0

 COL. TOTALS 49.8  24.9   8.3  16.6                   12               4.5
 200 METER LEVEL WINDS AFTERNOON  NOVEMBER,1978
  DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TO    TC    TC    THAN     TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

        N                                              0      0.0
      NNE                                              0      0.0
       NE         11.1                                 1     11.1      3.5
      ENE                                              0      0.0
        E                                              0      0.0
      ESE                                              0      0.0
       SE                                              0      0.0
      SSE   22.2  22.2  33.3                           7     77.7      4.4
        S   11.1                                       1     11.1      1.3
      SSW                                              0      0.0
       SW                                              0      0.0
      WSW                                              0      0.0
        W                                              0      0.0
      WNW                                              0      0.0
       NW                                              0      0.0
      NNW                                              0      0.0

    CALM                                               0      0.0

 COL. TOTALS 33.3  33.3  33.3                          9               3.9
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             FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 300 METER LEVEL WINDS MORNING     NOVEMBER,1978
  DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TC    TC    TC    TC    THAN     TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

        N                                              0      0.0
      NNE                      8.3                     1      8.3     11.9
       NE    8.3                                       1      8.3       .8
      ENE                                              0      0.0
        E    8.3                                       1      8.3      1.4
      ESE    8.3                                       1      8.3      1.6
       SE                                              0      0.0
      SSE    8.3                                       1      8.3      1.2
        S          8.3         8.3   8.3               3     24.9     10.8
      SSW          8.3   8.3                           2     16.6      5.9
       SW    8.3                                       1      8.3       .7
      WSW          8.3                                 1      8.3      3.3
        W                                              0      0.0
      WNW                                              0      0.0
       NW                                              0      0.0
      NNW                                              0      0.0

    CALM                                               0      0.0

 COL. TOTALS 41.5  24.9   8.3  16.6   8.3             12               5.4
 300 METER LEVEL WINDS AFTERNOON  NOVEMBER,1978
  DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TC    TC    TC    THAN     TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

        N                                              0      0.0
      NNE                                              0      0.0
       NE               11.1                           1     11.1      8.5
      ENE                                              0      0.0
        E                                              0      0.0
      ESE                                              0      0.0
       SE   22.2                                       2     22.2      1.2
      SSE   11.1  33.3                                 4     44.4      3.6
        S                     11.1                     1     11.1     10.4
      SSW                                              0      0.0
       SW                                              0      0.0
      WSW                                              0      0.0
        W                                              0      0.0
      WNW                                              0      0.0
       NW                                              0      0.0
      NNW   11.1                                       1     11.1       .8

    CALM                                               0      0.0

 COL. TOTALS 44.4  33.3  11.1  11.1                    9               4.0
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING NOVEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE				8.3			1	8.3	14.3
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	8.3						1	8.3	1.4
SSE		8.3					1	8.3	4.9
S		8.3		8.3			2	16.6	9.9
SSW	16.6	8.3			8.3		4	33.2	7.5
SW			8.3				1	8.3	8.8
WSW		8.3					1	8.3	5.4
W							0	0.0	
WNW				8.3			1	8.3	11.4
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	24.9	33.2	8.3	24.9	8.3		12		8.0

500 METER LEVEL WINDS AFTERNOON NOVEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE					11.1		1	11.1	17.2
ENE	11.1						1	11.1	.9
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		22.2	22.2				4	44.4	5.7
S		11.1	11.1				2	22.2	6.3
SSW							0	0.0	
SW				11.1			1	11.1	10.1
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	33.3	33.3	11.1	11.1		9		7.1

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING NOVEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE			11.1				1	11.1	8.1
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			11.1				1	11.1	7.3
S		11.1					1	11.1	3.2
SSW						11.1	1	11.1	27.2
SW		11.1		11.1			2	22.2	7.2
WSW			11.1				1	11.1	6.3
W			11.1				1	11.1	6.7
WNW							0	0.0	
NW							0	0.0	
NNW	11.1						1	11.1	1.5
CALM							0	0.0	
COL. TOTALS	11.1	22.2	44.4	11.1		11.1	9		8.3

750 METER LEVEL WINDS AFTERNOON NOVEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE			11.1				1	11.1	6.7
ENE			11.1				1	11.1	6.8
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		11.1					1	11.1	4.9
S			22.2				2	22.2	6.1
SSW	11.1						1	11.1	.7
SW		22.2					2	22.2	4.0
WSW			11.1				1	11.1	7.2
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	33.3	55.5				9		5.1

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING   NOVEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND	************	************	************	************	************	************	************
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			11.1				1	11.1	7.4
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE				11.1			1	11.1	11.5
S							0	0.0	
SSW	11.1						1	11.1	.9
SW			11.1				1	11.1	8.8
WSW		11.1			11.1		2	22.2	10.8
W	11.1			11.1			2	22.2	6.5
WNW				11.1			1	11.1	13.8
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	22.2	11.1	22.2	33.3	11.1		9		8.5

1000 METER LEVEL WINDS AFTERNOON NOVEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND	************	************	************	************	************	************	************
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S	12.5	12.5		12.5			3	37.5	5.3
SSW	12.5						1	12.5	1.9
SW		25.0	12.5				3	37.5	6.0
WSW							0	0.0	
W							0	0.0	
WNW		12.5					1	12.5	4.9
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	25.0	50.0	12.5	12.5			6		5.1

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING   NOVEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND	************	************	************	************	************	************	************
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		14.2					1	14.2	3.9
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE			14.2				1	14.2	7.3
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW					28.5		2	28.5	17.0
W							0	0.0	
WNW		14.2	14.2				2	28.4	7.4
NW							0	0.0	
NNW	14.2						1	14.2	2.1
CALM							0	0.0	
COL. TOTALS	14.2	28.4	28.4		28.5		7		8.9

1500 METER LEVEL WINDS AFTERNOON NOVEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND	************	************	************	************	************	************	************
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE				14.2			1	14.2	12.0
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	14.2						1	14.2	.8
S							0	0.0	
SSW					14.2		1	14.2	16.1
SW			14.2				1	14.2	8.1
WSW							0	0.0	
W		14.2					1	14.2	5.3
WNW			14.2				1	14.2	9.4
NW							0	0.0	
NNW	14.2						1	14.2	1.1
CALM							0	0.0	
COL. TOTALS	28.4	14.2	28.4	14.2	14.2		7		7.5

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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING    NOVEMBER,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
               00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

          N                                                0      0.0
        NNE                                                0      0.0
         NE                                                0      0.0
        ENE                                                0      0.0
          E                                                0      0.0
        ESE                                                0      0.0
         SE                                                0      0.0
        SSE                                                0      0.0
          S                                                0      0.0
        SSW                                                0      0.0
         SW                                                0      0.0
        WSW                                                0      0.0
          W                          50.0                  1     50.0     16.3
        WNW                          50.0                  1     50.0     22.1
         NW                                                0      0.0
        NNW                                                0      0.0

       CALM                                                0      0.0

COL. TOTALS                         100.0                  2              19.2
2000 METER LEVEL WINDS AFTERNOON  NOVEMBER,1978
  DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
               00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

          N                                                0      0.0
        NNE                                                0      0.0
         NE                                                0      0.0
        ENE                25.0                            1     25.0      7.9
          E                                                0      0.0
        ESE                                                0      0.0
         SE                                                0      0.0
        SSE                                                0      0.0
          S                                                0      0.0
        SSW                                                0      0.0
         SW                                                0      0.0
        WSW                      25.0                      1     25.0     10.9
          W          25.0        25.0                      2     50.0      8.6
        WNW                                                0      0.0
         NW                                                0      0.0
        NNW                                                0      0.0

       CALM                                                0      0.0

COL. TOTALS          25.0  25.0  50.0                      4               9.0
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                    FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
        SURFACE WINDS MORNING     DECEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

       N     11.1                                       1     11.1      .4
     NNE           11.1                                 1     11.1     5.1
      NE                                                0      0.0
     ENE                                                0      0.0
       E                                                0      0.0
     ESE                                                0      0.0
      SE           11.1  11.1                           2     22.2     6.0
     SSE     11.1                                       1     11.1     2.9
       S                                                0      0.0
     SSW     22.2                                       2     22.2     2.1
      SW           11.1                                 1     11.1     5.4
     WSW                                                0      0.0
       W                                                0      0.0
     WNW                                                0      0.0
      NW                                                0      0.0
     NNW     11.1                                       1     11.1      .9

    CALM                                                0      0.0

COL. TOTALS  55.5  33.3  11.1                           9              3.4
        SURFACE WINDS AFTERNOON  DECEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

       N           11.1                                 1     11.1     4.0
     NNE     22.2                                       2     22.2     1.0
      NE     11.1        11.1                           2     22.2     4.7
     ENE                                                0      0.0
       E                                                0      0.0
     ESE                                                0      0.0
      SE     11.1                                       1     11.1     1.3
     SSE     11.1                                       1     11.1     1.1
       S                                                0      0.0
     SSW     11.1                                       1     11.1      .7
      SW                                                0      0.0
     WSW           11.1                                 1     11.1     4.0
       W                                                0      0.0
     WNW                                                0      0.0
      NW                                                0      0.0
     NNW                                                0      0.0

    CALM                                                0      0.0

COL. TOTALS  66.6  22.2  11.1                           9              2.5
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                    FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
100 METER LEVEL WINDS MORNING     DECEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

       N     11.1  11.1                                 2     22.2     2.8
     NNE                                                0      0.0
      NE                 11.1                           1     11.1     6.4
     ENE                                                0      0.0
       E                                                0      0.0
     ESE                                                0      0.0
      SE                                                0      0.0
     SSE           11.1        11.1  11.1               3     33.3    11.4
       S                                                0      0.0
     SSW           11.1                                 1     11.1     4.6
      SW           11.1                                 1     11.1     4.7
     WSW                                                0      0.0
       W                                                0      0.0
     WNW     11.1                                       1     11.1     2.5
      NW                                                0      0.0
     NNW                                                0      0.0

    CALM                                                0      0.0

COL. TOTALS  22.2  44.4  11.1  11.1  11.1               9              6.4
100 METER LEVEL WINDS AFTERNOON  DECEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

       N                                                0      0.0
     NNE                                                0      0.0
      NE           22.2  22.2                           4     44.4     6.9
     ENE                                                0      0.0
       E                                                0      0.0
     ESE                                                0      0.0
      SE                                                0      0.0
     SSE     11.1                                       1     11.1     1.8
       S     22.2                                       2     22.2     1.5
     SSW                                                0      0.0
      SW                                                0      0.0
     WSW                                                0      0.0
       W                 11.1                           1     11.1     6.3
     WNW                                                0      0.0
      NW                                                0      0.0
     NNW     11.1                                       1     11.1     1.5

    CALM                                                0      0.0

COL. TOTALS  44.4  22.2  33.3                           9              4.5
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 200 METER LEVEL WINDS MORNING     DECEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
              TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT   SPEED

         N                                             0     0.0
       NNE               11.1                          1    11.1     6.9
        NE         11.1                                1    11.1     4.6
       ENE   11.1                                      1    11.1     2.7
         E                                             0     0.0
       ESE                                             0     0.0
        SE                                             0     0.0
       SSE                     11.1                    1    11.1    13.4
         S         11.1  11.1                          2    22.2     5.3
       SSW         11.1                                1    11.1     3.7
        SW               11.1                          1    11.1     8.4
       WSW               11.1                          1    11.1     6.3
         W                                             0     0.0
       WNW                                             0     0.0
        NW                                             0     0.0
       NNW                                             0     0.0

      CALM                                             0     0.0

COL. TOTALS  11.1  33.3  44.4  11.1                    9             6.2
 200 METER LEVEL WINDS AFTERNOON  DECEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
              TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT   SPEED

         N   11.1                                      1    11.1      .9
       NNE         11.1                                1    11.1     4.0
        NE         11.1  11.1  11.1                    3    33.3     7.9
       ENE                                             0     0.0
         E                                             0     0.0
       ESE                                             0     0.0
        SE                                             0     0.0
       SSE                                             0     0.0
         S         11.1                                1    11.1     3.1
       SSW                                             0     0.0
        SW   11.1                                      1    11.1      .2
       WSW                                             0     0.0
         W               11.1                          1    11.1     7.2
       WNW                                             0     0.0
        NW   11.1                                      1    11.1      .7
       NNW                                             0     0.0

      CALM                                             0     0.0

COL. TOTALS  33.3  33.3  22.2  11.1                    9             4.4
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 300 METER LEVEL WINDS MORNING     DECEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
              TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT   SPEED

         N                                             0     0.0
       NNE               11.1                          1    11.1     9.4
        NE                                             0     0.0
       ENE         11.1                                1    11.1     3.1
         E                                             0     0.0
       ESE         11.1                                1    11.1     5.9
        SE                                             0     0.0
       SSE                     11.1                    1    11.1    12.3
         S               22.2                          2    22.2     6.7
       SSW         11.1                                1    11.1     4.2
        SW               11.1                          1    11.1     7.6
       WSW               11.1                          1    11.1     7.6
         W                                             0     0.0
       WNW                                             0     0.0
        NW                                             0     0.0
       NNW                                             0     0.0

      CALM                                             0     0.0

COL. TOTALS        33.3  55.5  11.1                    9             7.0
 300 METER LEVEL WINDS AFTERNOON  DECEMBER,1978
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
              TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT   SPEED

         N                                             0     0.0
       NNE               11.1                          1    11.1     6.8
        NE         11.1  11.1                          2    22.2     5.9
       ENE   11.1        11.1                          2    22.2     4.3
         E                                             0     0.0
       ESE         11.1                                1    11.1     3.3
        SE                                             0     0.0
       SSE                                             0     0.0
         S                                             0     0.0
       SSW                                             0     0.0
        SW                                             0     0.0
       WSW   11.1                                      1    11.1     1.5
         W                     11.1                    1    11.1    13.6
       WNW                                             0     0.0
        NW         11.1                                1    11.1     4.2
       NNW                                             0     0.0

      CALM                                             0     0.0

COL. TOTALS  22.2  33.3  33.3  11.1                    9             5.5
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING   DECEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE				11.1			1	11.1	10.4
NE							0	0.0	
ENE							0	0.0	
E	11.1						1	11.1	2.6
ESE							0	0.0	
SE				11.1			1	11.1	10.6
SSE							0	0.0	
S			11.1				1	11.1	9.2
SSW		11.1					1	11.1	3.7
SW		11.1	11.1				2	22.2	6.0
WSW		11.1					1	11.1	5.7
W			11.1				1	11.1	7.3
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	33.3	33.3	22.2			9		6.8

500 METER LEVEL WINDS AFTERNOON DECEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE		11.1		11.1			2	22.2	7.7
NE	11.1			11.1			2	22.2	6.3
ENE							0	0.0	
E							0	0.0	
ESE		11.1					1	11.1	5.1
SE							0	0.0	
SSE		11.1					1	11.1	3.2
S		11.1					1	11.1	3.4
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW			11.1				1	11.1	9.9
NW			11.1				1	11.1	8.1
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	44.4	22.2	22.2			9		6.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING   DECEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE				12.5			1	12.5	13.0
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE			12.5				1	12.5	8.1
SSE							0	0.0	
S							0	0.0	
SSW		12.5					1	12.5	5.6
SW			12.5				1	12.5	8.3
WSW		25.0	12.5				3	37.5	5.7
W				12.5			1	12.5	10.0
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		37.5	37.5	25.0			8		7.7

750 METER LEVEL WINDS AFTERNOON DECEMBER,1978

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE			16.6				1	16.6	7.4
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			16.6				1	16.6	9.8
S	16.6						1	16.6	2.8
SSW	16.6	16.6					2	33.2	3.0
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW			16.6				1	16.6	8.9
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	33.2	16.6	49.8				6		5.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING DECEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE			20.0				1	20.0	6.2
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW			40.0				2	40.0	7.2
W		20.0					1	20.0	4.3
WNW				20.0			1	20.0	10.3
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		20.0	60.0	20.0			5		7.0

1000 METER LEVEL WINDS AFTERNOON DECEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE		20.0					1	20.0	3.8
SE							0	0.0	
SSE							0	0.0	
S			20.0				1	20.0	9.9
SSW		20.0					1	20.0	3.0
SW							0	0.0	
WSW			20.0				1	20.0	8.4
W							0	0.0	
WNW							0	0.0	
NW			20.0				1	20.0	6.4
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		40.0	60.0				5		6.3

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING DECEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E			50.0				1	50.0	6.6
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W			50.0				1	50.0	9.6
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS			100.0				2		8.1

1500 METER LEVEL WINDS AFTERNOON DECEMBER,1978

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE				25.0			1	25.0	11.7
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW		25.0	25.0				2	50.0	6.2
W							0	0.0	
WNW							0	0.0	
NW						25.0	1	25.0	25.3
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		25.0	25.0	25.0		25.0	4		12.3

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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING    DECEMBER,1978
  DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0     COUNT  PERCENT  SPEED

       N                                                 0      0.0
     NNE                                                 0      0.0
      NE                                                 0      0.0
     ENE                                                 0      0.0
       E                                                 0      0.0
     ESE                                                 0      0.0
      SE                                                 0      0.0
     SSE                                                 0      0.0
       S                                                 0      0.0
     SSW                                                 0      0.0
      SW                                                 0      0.0
     WSW                                                 0      0.0
       W                                                 0      0.0
     WNW                                                 0      0.0
      NW                                                 0      0.0
     NNW                                                 0      0.0

    CALM                                                 0      0.0

COL. TOTALS                                              0
2000 METER LEVEL WINDS AFTERNOON  DECEMBER,1978
  DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0     COUNT  PERCENT  SPEED

       N                                                 0      0.0
     NNE                                                 0      0.0
      NE                                                 0      0.0
     ENE                                                 0      0.0
       E                                                 0      0.0
     ESE                                                 0      0.0
      SE                                                 0      0.0
     SSE                100.0                            1    100.0      6.1
       S                                                 0      0.0
     SSW                                                 0      0.0
      SW                                                 0      0.0
     WSW                                                 0      0.0
       W                                                 0      0.0
     WNW                                                 0      0.0
      NW                                                 0      0.0
     NNW                                                 0      0.0

    CALM                                                 0      0.0

COL. TOTALS             100.0                            1               6.1
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        FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

       SURFACE WINDS MORNING      JANUARY,1979

DIRECTION   ********* WIND SPEEDS METERS/SECOND *****************************
            00.1   03.0   06.0   10.0   16.0   GREATER     ROW  SUMMARY
             TO     TO     TO     TO     TO     THAN     TOTAL   TOTAL  AVERAGE
            02.9   05.9   09.9   15.9   25.0    25.0     COUNT  PERCENT   SPEED

        N   25.0   12.5                                      3     37.5     2.0
      NNE          12.5                                      1     12.5     4.2
       NE                                                    0      0.0
      ENE                                                    0      0.0
        E   12.5                                             1     12.5      .7
      ESE                                                    0      0.0
       SE                                                    0      0.0
      SSE                                                    0      0.0
        S                                                    0      0.0
      SSW                                                    0      0.0
       SW   12.5                                             1     12.5      .7
      WSW                                                    0      0.0
        W                                                    0      0.0
      WNW                                                    0      0.0
       NW   12.5                                             1     12.5      .4
      NNW   12.5                                             1     12.5     2.5

     CALM                                                    0      0.0

COL. TOTALS 75.0   25.0                                      6              1.8

       SURFACE WINDS AFTERNOON    JANUARY,1979

DIRECTION   ********* WIND SPEEDS METERS/SECOND *****************************
            00.1   03.0   06.0   10.0   16.0   GREATER     ROW  SUMMARY
             TO     TO     TO     TO     TO     THAN     TOTAL   TOTAL  AVERAGE
            02.9   05.9   09.9   15.9   25.0    25.0     COUNT  PERCENT   SPEED

        N                                                    0      0.0
      NNE                                                    0      0.0
       NE   16.6                                             2     16.6      .6
      ENE                                                    0      0.0
        E                                                    0      0.0
      ESE                                                    0      0.0
       SE                                                    0      0.0
      SSE                                                    0      0.0
        S   41.6                                             5     41.6     1.1
      SSW   16.6                                             2     16.6     1.5
       SW    8.3                                             1      8.3     1.4
      WSW    8.3                                             1      8.3      .7
        W                                                    0      0.0
      WNW                                                    0      0.0
       NW    8.3                                             1      8.3      .2
      NNW                                                    0      0.0

     CALM                                                    0      0.0

COL. TOTALS 99.7                                            12              1.0
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        FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING      JANUARY,1979

DIRECTION   ********* WIND SPEEDS METERS/SECOND *****************************
            00.1   03.0   06.0   10.0   16.0   GREATER     ROW  SUMMARY
             TO     TO     TO     TO     TO     THAN     TOTAL   TOTAL  AVERAGE
            02.9   05.9   09.9   15.9   25.0    25.0     COUNT  PERCENT   SPEED

        N          12.5                                      1     12.5     5.8
      NNE                 12.5                               1     12.5     5.7
       NE   12.5   12.5                                      2     25.0     3.2
      ENE          12.5                                      1     12.5     5.0
        E                                                    0      0.0
      ESE                                                    0      0.0
       SE                                                    0      0.0
      SSE   12.5                                             1     12.5     1.7
        S                                                    0      0.0
      SSW                                                    0      0.0
       SW                                                    0      0.0
      WSW                                                    0      0.0
        W   12.5                                             1     12.5      .5
      WNW                                                    0      0.0
       NW                                                    0      0.0
      NNW   12.5                                             1     12.5     1.9

     CALM                                                    0      0.0

COL. TOTALS 50.0   37.5   12.5                               8              3.8

100 METER LEVEL WINDS AFTERNOON    JANUARY,1979

DIRECTION   ********* WIND SPEEDS METERS/SECOND *****************************
            00.1   03.0   06.0   10.0   16.0   GREATER     ROW  SUMMARY
             TO     TO     TO     TO     TO     THAN     TOTAL   TOTAL  AVERAGE
            02.9   05.9   09.9   15.9   25.0    25.0     COUNT  PERCENT   SPEED

        N                                                    0      0.0
      NNE                                                    0      0.0
       NE                                                    0      0.0
      ENE    8.3                                             1      8.3     2.4
        E   16.6                                             2     16.6     1.2
      ESE                                                    0      0.0
       SE    8.3                                             1      8.3      .5
      SSE                                                    0      0.0
        S   16.6   25.0                                      5     41.6     2.4
      SSW   16.6                                             2     16.6     1.4
       SW    8.3                                             1      8.3      .8
      WSW                                                    0      0.0
        W                                                    0      0.0
      WNW                                                    0      0.0
       NW                                                    0      0.0
      NNW                                                    0      0.0

     CALM                                                    0      0.0

COL. TOTALS 74.7   25.0                                     12              1.7
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING JANUARY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			12.5	12.5			2	25.0	10.3
NE		12.5					1	12.5	3.7
ENE		12.5					1	12.5	5.7
E							0	0.0	
ESE							0	0.0	
SE	12.5						1	12.5	1.2
SSE		25.0					2	25.0	4.4
S	12.5						1	12.5	.1
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	25.0	50.0	12.5	12.5			8		5.0

200 METER LEVEL WINDS AFTERNOON JANUARY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	8.3						1	8.3	1.2
NE	8.3	8.3					2	16.6	3.0
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	8.3						1	8.3	1.4
SSE		16.6					2	16.6	4.7
S							0	0.0	
SSW	16.6						2	16.6	1.0
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW	16.6						2	16.6	1.0
NNW	16.6						2	16.6	.6
CALM							0	0.0	
COL. TOTALS	74.7	24.9					12		1.9

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING JANUARY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE				14.2			1	14.2	14.0
NE		14.2					1	14.2	3.1
ENE		14.2					1	14.2	4.0
E	14.2						1	14.2	.3
ESE	14.2						1	14.2	1.4
SE							0	0.0	
SSE			14.2				1	14.2	9.0
S		14.2					1	14.2	4.0
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	28.4	42.6	14.2	14.2			7		5.1

300 METER LEVEL WINDS AFTERNOON JANUARY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		16.6					2	16.6	3.4
NE		8.3					1	8.3	3.1
ENE							0	0.0	
E	8.3						1	8.3	1.5
ESE							0	0.0	
SE							0	0.0	
SSE		16.6					2	16.6	4.5
S	8.3	8.3					2	16.6	2.7
SSW	16.6						2	16.6	1.3
SW							0	0.0	
WSW	8.3						1	8.3	.6
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	8.3						1	8.3	2.5
CALM							0	0.0	
COL. TOTALS	49.8	49.8					12		2.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING JANUARY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			16.6				1	16.6	7.8
NE							0	0.0	
ENE							0	0.0	
E	50.0						3	50.0	2.4
ESE							0	0.0	
SE							0	0.0	
SSE			16.6				1	16.6	8.0
S							0	0.0	
SSW		16.6					1	16.6	5.1
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	50.0	16.6	33.2				6		4.7

500 METER LEVEL WINDS AFTERNOON JANUARY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	16.6		8.3				3	24.9	4.0
NE		8.3					1	8.3	5.7
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	8.3						1	8.3	1.5
SSE	8.3	16.6	16.6				5	41.5	4.3
S							0	0.0	
SSW	8.3						1	8.3	.8
SW							0	0.0	
WSW		8.3					1	8.3	4.8
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	41.5	33.2	24.9				12		3.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING JANUARY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			20.0				1	20.0	9.0
NE							0	0.0	
ENE							0	0.0	
E	20.0						1	20.0	2.0
ESE							0	0.0	
SE							0	0.0	
SSE			20.0				1	20.0	9.4
S			20.0				1	20.0	7.9
SSW							0	0.0	
SW			20.0				1	20.0	6.7
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	20.0		80.0				5		7.0

750 METER LEVEL WINDS AFTERNOON JANUARY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	8.3	8.3					2	16.6	2.0
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	16.6	8.3	8.3				4	33.2	3.1
S							0	0.0	
SSW		8.3					1	8.3	4.3
SW		16.6					2	16.6	3.4
WSW		8.3					1	8.3	4.9
W							0	0.0	
WNW		8.3					1	8.3	4.9
NW	8.3						1	8.3	1.9
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	33.2	58.1	8.3				12		3.3

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           FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1000 METER LEVEL WINDS MORNING      JANUARY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N                                                 0     0.0
      NNE                                                 0     0.0
       NE                                                 0     0.0
      ENE                                                 0     0.0
        E                                                 0     0.0
      ESE                                                 0     0.0
       SE                                                 0     0.0
      SSE           33.3                                  1    33.3      3.4
        S                                                 0     0.0
      SSW     33.3                                        1    33.3      1.6
       SW                 33.3                            1    33.3      6.5
      WSW                                                 0     0.0
        W                                                 0     0.0
      WNW                                                 0     0.0
       NW                                                 0     0.0
      NNW                                                 0     0.0

     CALM                                                 0     0.0

COL. TOTALS   33.3  33.3  33.3                            3              3.9
1000 METER LEVEL WINDS AFTERNOON    JANUARY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N                                                 0     0.0
      NNE                                                 0     0.0
       NE                                                 0     0.0
      ENE                                                 0     0.0
        E                                                 0     0.0
      ESE                                                 0     0.0
       SE                                                 0     0.0
      SSE            9.0                                  1     9.0      3.7
        S           18.1                                  2    18.1      4.5
      SSW                                                 0     0.0
       SW      9.0   9.0                                  2    18.0      3.2
      WSW      9.0  18.1   9.0                            4    36.1      4.3
        W      9.0   9.0                                  2    18.0      2.9
      WNW                                                 0     0.0
       NW                                                 0     0.0
      NNW                                                 0     0.0

     CALM                                                 0     0.0

COL. TOTALS   27.0  63.2   9.0                           11              3.8
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           FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1500 METER LEVEL WINDS MORNING      JANUARY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N                                                 0     0.0
      NNE                                                 0     0.0
       NE                                                 0     0.0
      ENE                                                 0     0.0
        E                                                 0     0.0
      ESE                                                 0     0.0
       SE                                                 0     0.0
      SSE                                                 0     0.0
        S                                                 0     0.0
      SSW                                                 0     0.0
       SW                                                 0     0.0
      WSW                                                 0     0.0
        W                                                 0     0.0
      WNW                                                 0     0.0
       NW          100.0                                  1   100.0      4.8
      NNW                                                 0     0.0

     CALM                                                 0     0.0

COL. TOTALS        100.0                                  1              4.8
1500 METER LEVEL WINDS AFTERNOON    JANUARY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N           10.0                                  1    10.0      5.3
      NNE                                                 0     0.0
       NE                                                 0     0.0
      ENE                                                 0     0.0
        E                                                 0     0.0
      ESE                                                 0     0.0
       SE                                                 0     0.0
      SSE                                                 0     0.0
        S                                                 0     0.0
      SSW     10.0                                        1    10.0      2.5
       SW     10.0                                        1    10.0      1.5
      WSW                       10.0                      1    10.0     11.4
        W           20.0  10.0                            3    30.0      5.4
      WNW           10.0  10.0                            2    20.0      5.2
       NW                 10.0                            1    10.0      6.3
      NNW                                                 0     0.0

     CALM                                                 0     0.0

COL. TOTALS   20.0  40.0  30.0  10.0                     10              5.3
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING      JANUARY,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

        N                                               0      0.0
      NNE                                               0      0.0
       NE                                               0      0.0
      ENE                                               0      0.0
        E                                               0      0.0
      ESE                                               0      0.0
       SE                                               0      0.0
      SSE                                               0      0.0
        S                                               0      0.0
      SSW                                               0      0.0
       SW                                               0      0.0
      WSW                                               0      0.0
        W                                               0      0.0
      WNW                                               0      0.0
       NW                                               0      0.0
      NNW                                               0      0.0

    CALM                                                0      0.0

COL. TOTALS                                             0
2000 METER LEVEL WINDS AFTERNOON    JANUARY,1979

  DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

        N                                               0      0.0
      NNE                                               0      0.0
       NE                                               0      0.0
      ENE                                               0      0.0
        E                                               0      0.0
      ESE                                               0      0.0
       SE                                               0      0.0
      SSE                                               0      0.0
        S                                               0      0.0
      SSW                                               0      0.0
       SW                                               0      0.0
      WSW                                               0      0.0
        W           20.0  20.0                          2     40.0     5.8
      WNW                 20.0                          1     20.0     6.5
       NW                 40.0                          2     40.0     7.6
      NNW                                               0      0.0

    CALM                                                0      0.0

COL. TOTALS         20.0  80.0                          5              6.6
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
         SURFACE WINDS MORNING     FEBRUARY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
                TO    TO    TO    TC    TO    THAN      TOTAL   TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

          N    22.2                                       2      22.2     1.5
        NNE    11.1  11.1                                 2      22.2     2.9
         NE                                               0       0.0
        ENE                                               0       0.0
          E                                               0       0.0
        ESE                                               0       0.0
         SE          11.1                                 1      11.1     4.4
        SSE    11.1  22.2                                 3      33.3     3.3
          S          11.1                                 1      11.1     3.1
        SSW                                               0       0.0
         SW                                               0       0.0
        WSW                                               0       0.0
          W                                               0       0.0
        WNW                                               0       0.0
         NW                                               0       0.0
        NNW                                               0       0.0

       CALM                                               0       0.0

 COL. TOTALS   44.4  55.5                                 9               2.9
         SURFACE WINDS AFTERNOON  FEBRUARY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
                TO    TO    TO    TC    TO    THAN      TOTAL   TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

          N                                               0       0.0
        NNE                                               0       0.0
         NE                11.1                           1      11.1     9.2
        ENE                                               0       0.0
          E                                               0       0.0
        ESE                                               0       0.0
         SE    11.1  11.1                                 2      22.2     3.6
        SSE          11.1                                 1      11.1     5.1
          S    11.1  11.1                                 2      22.2     3.1
        SSW    11.1                                       1      11.1      .7
         SW    11.1                                       1      11.1     1.7
        WSW                                               0       0.0
          W                                               0       0.0
        WNW    11.1                                       1      11.1     1.0
         NW                                               0       0.0
        NNW                                               0       0.0

       CALM                                               0       0.0

 COL. TOTALS   55.5  33.3  11.1                           9               3.4
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 100 METER LEVEL WINDS MORNING     FEBRUARY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
                TO    TO    TO    TC    TO    THAN      TOTAL   TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

          N    11.1                                       1      11.1     1.1
        NNE          11.1  11.1                           2      22.2     4.8
         NE                                               0       0.0
        ENE                                               0       0.0
          E                                               0       0.0
        ESE    11.1                                       1      11.1      .7
         SE                                               0       0.0
        SSE          11.1  33.3                           4      44.4     6.9
          S                                               0       0.0
        SSW    11.1                                       1      11.1     2.9
         SW                                               0       0.0
        WSW                                               0       0.0
          W                                               0       0.0
        WNW                                               0       0.0
         NW                                               0       0.0
        NNW                                               0       0.0

       CALM                                               0       0.0

 COL. TOTALS   33.3  22.2  44.4                           9               4.6
 100 METER LEVEL WINDS AFTERNOON  FEBRUARY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
                TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

          N                                               0       0.0
        NNE                                               0       0.0
         NE    11.1              11.1                     2      22.2     6.1
        ENE                                               0       0.0
          E                                               0       0.0
        ESE                                               0       0.0
         SE                                               0       0.0
        SSE          44.4  11.1                           5      55.5     6.0
          S                                               0       0.0
        SSW    22.2                                       2      22.2     2.1
         SW                                               0       0.0
        WSW                                               0       0.0
          W                                               0       0.0
        WNW                                               0       0.0
         NW                                               0       0.0
        NNW                                               0       0.0

       CALM                                               0       0.0

 COL. TOTALS   33.3  44.4  11.1  11.1                     9               5.1
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

 200 METER LEVEL WINDS MORNING    FEBRUARY,1979

  DIRECTION  ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL   AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

         N                                              0     0.0
       NNE                                              0     0.0
        NE               11.1                           1    11.1    6.5
       ENE   11.1                                       1    11.1    2.1
         E                                              0     0.0
       ESE                                              0     0.0
        SE                                              0     0.0
       SSE   11.1              22.2                     3    33.3    7.5
         S   22.2                                       2    22.2    2.5
       SSW               11.1                           1    11.1    6.7
        SW                                              0     0.0
       WSW                                              0     0.0
         W   11.1                                       1    11.1    1.9
       WNW                                              0     0.0
        NW                                              0     0.0
       NNW                                              0     0.0

      CALM                                              0     0.0

COL. TOTALS  55.5        22.2  22.2                     9            4.9

 200 METER LEVEL WINDS AFTERNOON  FEBRUARY,1979

  DIRECTION  ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL   AVERAGE
             02.9  05.9  09.5  15.9  25.0   25.0     COUNT  PERCENT  SPEED

         N         11.1                                 1    11.1    3.2
       NNE                                              0     0.0
        NE                                              0     0.0
       ENE                                              0     0.0
         E                                              0     0.0
       ESE   11.1                                       1    11.1    1.7
        SE         11.1                                 1    11.1    4.5
       SSE         22.2  33.3  11.1                     6    66.6    6.5
         S                                              0     0.0
       SSW                                              0     0.0
        SW                                              0     0.0
       WSW                                              0     0.0
         W                                              0     0.0
       WNW                                              0     0.0
        NW                                              0     0.0
       NNW                                              0     0.0

      CALM                                              0     0.0

COL. TOTALS  11.1  44.4  33.3  11.1                     9            5.6
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

 300 METER LEVEL WINDS MORNING    FEBRUARY,1979

  DIRECTION  ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL   AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

         N                                              0     0.0
       NNE                                              0     0.0
        NE                                              0     0.0
       ENE                                              0     0.0
         E   11.1                                       1    11.1    2.9
       ESE                                              0     0.0
        SE                                              0     0.0
       SSE   11.1              22.2                     3    33.3    8.2
         S         11.1  11.1                           2    22.2    5.9
       SSW                                              0     0.0
        SW               22.2                           2    22.2    6.2
       WSW                                              0     0.0
         W                                              0     0.0
       WNW                                              0     0.0
        NW                                              0     0.0
       NNW   11.1                                       1    11.1     .9

      CALM                                              0     0.0

COL. TOTALS  33.3  11.1  33.3  22.2                     9            5.6

 300 METER LEVEL WINDS AFTERNOON  FEBRUARY,1979

  DIRECTION  ********* WIND SPEEDS METERS/SECOND ****************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL   AVERAGE
             02.9  05.9  09.5  15.9  25.0   25.0     COUNT  PERCENT  SPEED

         N                                              0     0.0
       NNE                                              0     0.0
        NE                                              0     0.0
       ENE                                              0     0.0
         E                                              0     0.0
       ESE   11.1                                       1    11.1    2.1
        SE                                              0     0.0
       SSE         22.2        11.1                     3    33.3    7.2
         S               33.3  11.1                     4    44.4    8.7
       SSW                                              0     0.0
        SW                                              0     0.0
       WSW   11.1                                       1    11.1    2.6
         W                                              0     0.0
       WNW                                              0     0.0
        NW                                              0     0.0
       NNW                                              0     0.0

      CALM                                              0     0.0

COL. TOTALS  22.2  22.2  33.3  22.2                     9            6.8
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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
500 METER LEVEL WINDS MORNING    FEBRUARY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
             TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0    25.0    COUNT  PERCENT  SPEED

        N   11.1                                        1   11.1      2.2
      NNE                                               0    0.0
       NE                                               0    0.0
      ENE                                               0    0.0
        E                                               0    0.0
      ESE                                               0    0.0
       SE               11.1                            1   11.1      6.2
      SSE         11.1                                  1   11.1      3.5
        S               22.2                            2   22.2      7.3
      SSW   22.2                                        2   22.2      2.3
       SW               11.1                            1   11.1      9.9
      WSW                                               0    0.0
        W         11.1                                  1   11.1      4.4
      WNW                                               0    0.0
       NW                                               0    0.0
      NNW                                               0    0.0

     CALM                                               0    0.0

CL. TOTALS  33.3  22.2  44.4                            9                 5.0
500 METER LEVEL WINDS AFTERNOON  FEBRUARY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
             TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0    25.0    COUNT  PERCENT  SPEED

        N               11.1                            1   11.1      6.6
      NNE                                               0    0.0
       NE                                               0    0.0
      ENE                                               0    0.0
        E                                               0    0.0
      ESE                                               0    0.0
       SE                                               0    0.0
      SSE         11.1  33.3                            4   44.4      6.4
        S               44.4                            4   44.4      7.9
      SSW                                               0    0.0
       SW                                               0    0.0
      WSW                                               0    0.0
        W                                               0    0.0
      WNW                                               0    0.0
       NW                                               0    0.0
      NNW                                               0    0.0

     CALM                                               0    0.0

CL. TOTALS        11.1  88.8                            9                 7.1
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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
750 METER LEVEL WINDS MORNING    FEBRUARY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
             TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0    25.0    COUNT  PERCENT  SPEED

        N                                               0    0.0
      NNE                                               0    0.0
       NE                                               0    0.0
      ENE                                               0    0.0
        E                                               0    0.0
      ESE                                               0    0.0
       SE                                               0    0.0
      SSE         12.5                                  1   12.5      5.0
        S                                               0    0.0
      SSW               12.5                            1   12.5      9.7
       SW         12.5  12.5  12.5                      3   37.5      8.7
      WSW   12.5  25.0                                  3   37.5      3.5
        W                                               0    0.0
      WNW                                               0    0.0
       NW                                               0    0.0
      NNW                                               0    0.0

     CALM                                               0    0.0

COL. TOTALS 12.5  50.0  25.0  12.5                      8                 6.4
750 METER LEVEL WINDS AFTERNOON  FEBRUARY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
             TO    TO    TO    TO    TO     THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0    25.0    COUNT  PERCENT  SPEED

        N                                               0    0.0
      NNE                                               0    0.0
       NE                                               0    0.0
      ENE                                               0    0.0
        E                                               0    0.0
      ESE                                               0    0.0
       SE                                               0    0.0
      SSE                                               0    0.0
        S               33.3  22.2                      5   55.5      8.7
      SSW                                               0    0.0
       SW         11.1  11.1                            2   22.2      6.7
      WSW         11.1                                  1   11.1      5.9
        W                                               0    0.0
      WNW                                               0    0.0
       NW         11.1                                  1   11.1      5.9
      NNW                                               0    0.0

     CALM                                               0    0.0

COL. TOTALS       33.3  44.4  22.2                      9                 7.6
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1000 METER LEVEL WINDS MORNING    FEBRUARY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER        ROW   SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

       N                                             0      0.0
     NNE                                             0      0.0
      NE                                             0      0.0
     ENE                                             0      0.0
       E                                             0      0.0
     ESE                                             0      0.0
      SE                                             0      0.0
     SSE                                             0      0.0
       S                16.6                         1     16.6      9.9
     SSW                                             0      0.0
      SW                16.6  16.6                   2     33.2      9.2
     WSW                16.6  33.3                   3     49.9     11.1
       W                                             0      0.0
     WNW                                             0      0.0
      NW                                             0      0.0
     NNW                                             0      0.0

    CALM                                             0      0.0

COL. TOTALS             49.8  49.9                   6              10.2
1000 METER LEVEL WINDS AFTERNOON  FEBRUARY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER        ROW   SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

       N                                             0      0.0
     NNE                                             0      0.0
      NE                                             0      0.0
     ENE                                             0      0.0
       E                                             0      0.0
     ESE                                             0      0.0
      SE                                             0      0.0
     SSE                                             0      0.0
       S                      14.2                   1     14.2     11.6
     SSW          14.2  14.2                         2     28.4      6.5
      SW          14.2                               1     14.2      5.7
     WSW          14.2  14.2                         2     28.4      6.1
       W                                             0      0.0
     WNW    14.2                                     1     14.2      2.5
      NW                                             0      0.0
     NNW                                             0      0.0

    CALM                                             0      0.0

COL. TOTALS 14.2  42.6  28.4  14.2                   7               6.5
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1500 METER LEVEL WINDS MORNING    FEBRUARY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER        ROW   SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

       N                                             0      0.0
     NNE                                             0      0.0
      NE                                             0      0.0
     ENE                                             0      0.0
       E                                             0      0.0
     ESE                                             0      0.0
      SE                                             0      0.0
     SSE                                             0      0.0
       S                                             0      0.0
     SSW                                             0      0.0
      SW                      25.0                   1     25.0     10.1
     WSW          25.0                     25.0      2     50.0     30.7
       W                25.0                         1     25.0      9.7
     WNW                                             0      0.0
      NW                                             0      0.0
     NNW                                             0      0.0

    CALM                                             0      0.0

COL. TOTALS       25.0  25.0  25.0         25.0      4              20.3
1500 METER LEVEL WINDS AFTERNOON  FEBRUARY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER        ROW   SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

       N                                             0      0.0
     NNE                                             0      0.0
      NE          20.0                               1     20.0      3.3
     ENE                                             0      0.0
       E                                             0      0.0
     ESE                                             0      0.0
      SE                                             0      0.0
     SSE                                             0      0.0
       S                      20.0                   1     20.0     12.0
     SSW                                             0      0.0
      SW          20.0                               1     20.0      4.8
     WSW                20.0                         1     20.0      6.1
       W                            20.0             1     20.0     17.1
     WNW                                             0      0.0
      NW                                             0      0.0
     NNW                                             0      0.0

    CALM                                             0      0.0

COL. TOTALS       40.0  20.0  20.0  20.0             5               8.6
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                 FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING    FEBRUARY,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N                                                  0      0.0
    NNE                                                  0      0.0
     NE                                                  0      0.0
    ENE                                                  0      0.0
      E                                                  0      0.0
    ESE                                                  0      0.0
     SE                                                  0      0.0
    SSE                                                  0      0.0
      S                                                  0      0.0
    SSW                                                  0      0.0
     SW                     33.3                         1     33.3     15.8
    WSW                     33.3                         1     33.3     11.3
      W                     33.3                         1     33.3     14.7
    WNW                                                  0      0.0
     NW                                                  0      0.0
    NNW                                                  0      0.0

   CALM                                                  0      0.0

COL. TOTALS                 99.9                         3              13.9
2000 METER LEVEL WINDS AFTERNOON  FEBRUARY,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N                                                  0      0.0
    NNE                                                  0      0.0
     NE                                                  0      0.0
    ENE                                                  0      0.0
      E                                                  0      0.0
    ESE                                                  0      0.0
     SE                                                  0      0.0
    SSE                                                  0      0.0
      S                                                  0      0.0
    SSW                                                  0      0.0
     SW                                                  0      0.0
    WSW                                                  0      0.0
      W                    100.0                         1    100.0     11.8
    WNW                                                  0      0.0
     NW                                                  0      0.0
    NNW                                                  0      0.0

   CALM                                                  0      0.0

COL. TOTALS                100.0                         1              11.8
```

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*******************************************************************************

         FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

        SURFACE WINDS MORNING        MARCH,1979

  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL  TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT PERCENT  SPEED

          N        9.0                                 1    9.0     3.0
        NNE                                            0    0.0
         NE  9.0                                       1    9.0      .1
        ENE                                            0    0.0
          E                                            0    0.0
        ESE                                            0    0.0
         SE  9.0                                       1    9.0     2.0
        SSE       18.1                                 2   18.1     3.9
          S  9.0                                       1    9.0      .8
        SSW  9.0   9.0                                 2   18.0     2.6
         SW                                            0    0.0
        WSW 18.1                                       2   18.1     1.4
          W                                            0    0.0
        WNW                                            0    0.0
         NW  9.0                                       1    9.0     2.9
        NNW                                            0    0.0

       CALM                                            0    0.0

COL. TOTALS 63.1  36.1                                11            2.2

        SURFACE WINDS AFTERNOON      MARCH,1979

  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL  TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT PERCENT  SPEED

          N                                            0    0.0
        NNE                                            0    0.0
         NE  8.3   8.3                                 2   16.6     2.3
        ENE                                            0    0.0
          E                                            0    0.0
        ESE                                            0    0.0
         SE  8.3                                       1    8.3     2.2
        SSE                                            0    0.0
          S       25.0   8.3                           4   33.3     4.4
        SSW  8.3   8.3                                 2   16.6     3.2
         SW        8.3                                 1    8.3     5.4
        WSW        8.3                                 1    8.3     5.1
          W                                            0    0.0
        WNW                                            0    0.0
         NW  8.3                                       1    8.3     1.9
        NNW                                            0    0.0

       CALM                                            0    0.0

COL. TOTALS 33.2  58.2   8.3                          12            3.6
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         FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING        MARCH,1979

  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL  TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT PERCENT  SPEED

          N              9.0                           1    9.0     6.7
        NNE  9.0         9.0                           2   18.0     5.1
         NE  9.0                                       1    9.0     2.6
        ENE 18.1                                       2   18.1     2.3
          E                                            0    0.0
        ESE                                            0    0.0
         SE                                            0    0.0
        SSE             18.1                           2   18.1     8.0
          S        9.0                                 1    9.0     3.5
        SSW                                            0    0.0
         SW                    9.0                     1    9.0    10.0
        WSW                                            0    0.0
          W                                            0    0.0
        WNW                                            0    0.0
         NW  9.0                                       1    9.0      .5
        NNW                                            0    0.0

       CALM                                            0    0.0

COL. TOTALS 45.1   9.0  36.1   9.0                    11            4.9

100 METER LEVEL WINDS AFTERNOON      MARCH,1979

  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL  TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT PERCENT  SPEED

          N                                            0    0.0
        NNE  8.3                                       1    8.3     1.8
         NE        8.3                                 1    8.3     3.2
        ENE                                            0    0.0
          E  8.3                                       1    8.3     1.5
        ESE                                            0    0.0
         SE                                            0    0.0
        SSE        8.3   8.3                           2   16.6     6.0
          S 25.0                                       3   25.0     1.6
        SSW        8.3                                 1    8.3     3.0
         SW  8.3         8.3                           2   16.6     4.9
        WSW                                            0    0.0
          W              8.3                           1    8.3     6.7
        WNW                                            0    0.0
         NW                                            0    0.0
        NNW                                            0    0.0

       CALM                                            0    0.0

COL. TOTALS 49.9  24.9  24.9                          12            3.6
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING MARCH,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	9.0	9.0	9.0				3	27.0	4.9
NE	9.0	9.0	9.0				3	27.0	5.1
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			18.1				2	18.1	6.6
S							0	0.0	
SSW			9.0				1	9.0	6.4
SW			9.0				1	9.0	8.2
WSW	9.0						1	9.0	2.3
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	18.0	54.1				11		5.4

200 METER LEVEL WINDS AFTERNOON MARCH,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	8.3						1	8.3	1.6
NE		8.3					1	8.3	3.1
ENE	8.3						1	8.3	1.5
E							0	0.0	
ESE	8.3						1	8.3	1.5
SE							0	0.0	
SSE	8.3	25.0					4	33.3	3.6
S		8.3					1	8.3	4.0
SSW							0	0.0	
SW	8.3		8.3				2	16.6	4.2
WSW							0	0.0	
W			8.3				1	8.3	7.9
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	41.5	41.6	16.6				12		3.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING MARCH,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		9.0					1	9.0	4.1
NNE	9.0			9.0			2	18.0	6.2
NE	9.0		9.0				2	18.0	4.9
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	9.0						1	9.0	2.4
S			9.0				1	9.0	6.9
SSW	9.0	9.0	9.0				3	27.0	5.2
SW				9.0			1	9.0	11.5
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	36.0	18.0	27.0	18.0			11		5.7

300 METER LEVEL WINDS AFTERNOON MARCH,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	8.3						1	8.3	1.2
NE		8.3					1	8.3	3.8
ENE	8.3						1	8.3	.7
E							0	0.0	
ESE	8.3						1	8.3	2.6
SE							0	0.0	
SSE		25.0					3	25.0	5.2
S			8.3				1	8.3	6.6
SSW	8.3						1	8.3	2.6
SW							0	0.0	
WSW	8.3	8.3					2	16.6	4.1
W			8.3				1	8.3	8.1
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	41.5	41.6	16.6				12		4.1

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING   MARCH,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE			9.0				1	9.0	7.3
NE			9.0				1	9.0	6.3
ENE							0	0.0	
E	9.0						1	9.0	1.5
ESE							0	0.0	
SE							0	0.0	
SSE		18.1					2	18.1	3.6
S							0	0.0	
SSW			9.0				1	9.0	8.1
SW		9.0		9.0			2	18.0	7.7
WSW			9.0				1	9.0	9.5
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW		18.1					2	18.1	3.3
CALM							0	0.0	
COL. TOTALS	9.0	45.2	36.0	9.0			11		5.6

500 METER LEVEL WINDS AFTERNOON   MARCH,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE		8.3					1	8.3	3.6
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	8.3						1	8.3	2.2
S		8.3			8.3		2	16.6	10.4
SSW	8.3	16.6					3	24.9	4.2
SW	8.3						1	8.3	2.6
WSW				8.3			1	8.3	11.9
W		8.3					1	8.3	5.4
WNW			8.3				1	8.3	6.5
NW							0	0.0	
NNW	8.3						1	8.3	.7
CALM							0	0.0	
COL. TOTALS	33.2	41.5	8.3	8.3	8.3		12		5.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING   MARCH,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N	9.0						1	9.0	1.8
NNE							0	0.0	
NE							0	0.0	
ENE		9.0					1	9.0	3.1
E							0	0.0	
ESE							0	0.0	
SE			9.0				1	9.0	6.8
SSE							0	0.0	
S	9.0						1	9.0	1.7
SSW							0	0.0	
SW		9.0	18.1				3	27.1	7.1
WSW		9.0					1	9.0	4.0
W				9.0			1	9.0	10.7
WNW	18.1						2	18.1	2.3
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	36.1	27.0	27.1	9.0			11		4.9

750 METER LEVEL WINDS AFTERNOON   MARCH,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	11.1		11.1				2	22.2	4.0
S							0	0.0	
SSW	11.1	22.2					3	33.3	3.0
SW							0	0.0	
WSW				11.1			1	11.1	15.5
W		22.2					2	22.2	3.9
WNW		11.1					1	11.1	5.9
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	22.2	55.5	11.1	11.1			9		5.1

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING MARCH,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					***********			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	9.0	9.0					2	18.0	2.4
ENE							0	0.0	
E		9.0					1	9.0	4.4
ESE							0	0.0	
SE							0	0.0	
SSE	9.0						1	9.0	2.7
S							0	0.0	
SSW		9.0					1	9.0	4.5
SW		9.0					1	9.0	5.6
WSW		9.0		9.0	9.0		3	27.0	11.3
W			9.0				1	9.0	7.5
WNW							0	0.0	
NW	9.0						1	9.0	.7
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	45.0	9.0	9.0	9.0		11		5.8

1000 METER LEVEL WINDS AFTERNOON MARCH,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					***********			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			12.5				1	12.5	6.4
S		12.5					1	12.5	5.3
SSW							0	0.0	
SW		25.0					2	25.0	4.5
WSW			12.5				1	12.5	7.4
W		12.5					1	12.5	4.9
WNW			12.5				1	12.5	6.3
NW		12.5					1	12.5	3.0
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		62.5	37.5				8		5.2

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING MARCH,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					***********			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	10.0						1	10.0	1.8
NE	10.0						1	10.0	1.5
ENE		10.0					1	10.0	3.7
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		10.0					1	10.0	5.7
S							0	0.0	
SSW		10.0					1	10.0	4.4
SW							0	0.0	
WSW							0	0.0	
W			10.0	10.0	10.0		3	30.0	12.9
WNW		10.0					1	10.0	3.1
NW		10.0					1	10.0	5.0
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	20.0	50.0	10.0	10.0	10.0		10		6.4

1500 METER LEVEL WINDS AFTERNOON MARCH,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					***********			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E				12.5			1	12.5	12.0
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW		25.0					2	25.0	3.3
SW							0	0.0	
WSW					12.5		1	12.5	17.7
W		12.5	25.0	12.5			4	50.0	7.4
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		37.5	25.0	25.0	12.5		8		8.2

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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
  LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 2000 METER LEVEL WINDS MORNING       MARCH,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N                                                  0     0.0
      NNE                                                  0     0.0
       NE                                                  0     0.0
      ENE            16.6                                  1    16.6       3.4
        E                                                  0     0.0
      ESE                                                  0     0.0
       SE                                                  0     0.0
      SSE                                                  0     0.0
        S                                                  0     0.0
      SSW                                                  0     0.0
       SW                                                  0     0.0
      WSW      16.6                                        1    16.6       2.9
        W      33.3                                        2    33.3       2.5
      WNW                                                  0     0.0
       NW            16.6                                  1    16.6       5.0
      NNW                        16.6                      1    16.6      14.1

     CALM                                                  0     0.0

 COL. TOTALS   49.9  33.2        16.6                      6               5.0
 2000 METER LEVEL WINDS AFTERNOON     MARCH,1979

  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N                                                  0     0.0
      NNE                                                  0     0.0
       NE                                                  0     0.0
      ENE                                                  0     0.0
        E                                                  0     0.0
      ESE                                                  0     0.0
       SE                                                  0     0.0
      SSE                                                  0     0.0
        S                                                  0     0.0
      SSW                                                  0     0.0
       SW                                                  0     0.0
      WSW                                                  0     0.0
        W            33.3  33.3                            2    66.6       6.3
      WNW                                                  0     0.0
       NW                  33.3                            1    33.3       6.8
      NNW                                                  0     0.0

     CALM                                                  0     0.0

 COL. TOTALS         33.3  66.6                            3               6.4
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****

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING APRIL,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		9.0					1	9.0	3.1
ENE							0	0.0	
E							0	0.0	
ESE	9.0						1	9.0	.8
SE	18.1	9.0					3	27.1	2.1
SSE		9.0					1	9.0	3.8
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W	9.0						1	9.0	.7
WNW	9.0						1	9.0	.4
NW	18.1						2	18.1	1.2
NNW	9.0						1	9.0	.9
CALM							0	0.0	
COL. TOTALS	72.2	27.0					11		1.6

SURFACE WINDS AFTERNOON APRIL,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	7.6						1	7.6	2.7
NNE							0	0.0	
NE			7.6				1	7.6	6.5
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	7.6						1	7.6	1.1
SSE		23.0					3	23.0	3.9
S	15.3	15.3					4	30.6	2.6
SSW	7.6						1	7.6	1.3
SW			7.6				1	7.6	6.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	7.6						1	7.6	2.5
CALM							0	0.0	
COL. TOTALS	45.7	38.3	15.2				13		3.3

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING APRIL,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	9.0						1	9.0	.5
NNE	9.0	18.1					3	27.1	3.4
NE		9.0					1	9.0	3.0
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	9.0	9.0		9.0			3	27.0	6.4
S							0	0.0	
SSW	9.0						1	9.0	2.6
SW							0	0.0	
WSW							0	0.0	
W	18.1						2	18.1	1.1
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	54.1	36.1		9.0			11		3.4

100 METER LEVEL WINDS AFTERNOON APRIL,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			7.6				1	7.6	7.5
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	15.3						2	15.3	1.3
SSE	7.6	23.0					4	30.6	4.1
S							0	0.0	
SSW	7.6	7.6	7.6				3	22.8	3.9
SW							0	0.0	
WSW		7.6					1	7.6	5.0
W							0	0.0	
WNW	7.6						1	7.6	1.5
NW							0	0.0	
NNW	7.6						1	7.6	2.5
CALM							0	0.0	
COL. TOTALS	45.7	38.2	15.2				13		3.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING APRIL.1979

********* WIND SPEEDS METERS/SECOND ****************************

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		9.0	9.0		9.0		3	27.0	9.8
NE	9.0						1	9.0	2.8
ENE							0	0.0	
E							0	0.0	
ESE	18.1						2	18.1	2.3
SE							0	0.0	
SSE		9.0					1	9.0	4.5
S	9.0	9.0	9.0				3	27.0	4.0
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW	9.0						1	9.0	2.4
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.1	27.0	18.0		9.0		11		5.0

200 METER LEVEL WINDS AFTERNOON APRIL.1979

********* WIND SPEEDS METERS/SECOND ****************************

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			7.6				1	7.5	7.0
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	7.6	15.3	7.6	7.6			5	38.1	6.6
S							0	0.0	
SSW			15.3				2	15.3	7.6
SW							0	0.0	
WSW	7.6	7.6					2	15.2	3.3
W							0	0.0	
WNW	7.6						1	7.6	1.1
NW	7.6	7.6					2	15.2	3.0
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	30.4	30.5	30.5	7.6			13		5.3

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING APRIL.1979

********* WIND SPEEDS METERS/SECOND ****************************

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		9.0					1	9.0	4.2
NE			9.0				1	9.0	6.9
ENE							0	0.0	
E							0	0.0	
ESE	27.2	9.0					4	36.2	2.3
SE			9.0				1	9.0	6.3
SSE							0	0.0	
S	9.0						1	9.0	2.1
SSW		9.0	9.0				2	18.0	6.4
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW		9.0					1	9.0	3.1
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	36.2	36.0	27.0				11		4.0

300 METER LEVEL WINDS AFTERNOON APRIL.1979

********* WIND SPEEDS METERS/SECOND ****************************

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE		7.6					1	7.6	4.6
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	7.6	30.7					5	38.3	3.7
S				7.6			1	7.6	13.6
SSW		7.6					1	7.6	3.5
SW	7.6						1	7.6	2.1
WSW	7.6	7.6					2	15.2	3.3
W							0	0.0	
WNW							0	0.0	
NW	7.6						1	7.6	1.1
NNW	7.6						1	7.6	2.4
CALM							0	0.0	
COL. TOTALS	38.0	53.5		7.6			13		4.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING APRIL,1979

DIRECTION	********* WIND SPEEDS	METERS/SECOND	**********	**********	**********	**********	**********	**********	**********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	10.0						1	10.0	2.0
NNE		10.0					1	10.0	3.0
NE							0	0.0	
ENE							0	0.0	
E	10.0						1	10.0	2.1
ESE							0	0.0	
SE		10.0					1	10.0	5.6
SSE		10.0		10.0			2	20.0	7.8
S			10.0				1	10.0	6.6
SSW							0	0.0	
SW		10.0	10.0				2	20.0	4.9
WSW							0	0.0	
W							0	0.0	
WNW		10.0					1	10.0	4.0
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	20.0	50.0	20.0	10.0			10		4.8

500 METER LEVEL WINDS AFTERNOON APRIL,1979

DIRECTION	********* WIND SPEEDS	METERS/SECOND	**********	**********	**********	**********	**********	**********	**********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N			9.0				1	9.0	6.7
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	18.1	9.0					3	27.1	2.7
SE			9.0				1	9.0	6.8
SSE	9.0						1	9.0	1.6
S	9.0						1	9.0	2.4
SSW							0	0.0	
SW	18.1		9.0				3	27.1	3.8
WSW							0	0.0	
W	9.0						1	9.0	1.0
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	63.2	9.0	27.0				11		3.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING APRIL,1979

DIRECTION	********* WIND SPEEDS	METERS/SECOND	**********	**********	**********	**********	**********	**********	**********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	10.0						1	10.0	.3
ENE							0	0.0	
E							0	0.0	
ESE	10.0						1	10.0	2.6
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW		20.0	10.0				3	30.0	5.3
SW				10.0			1	10.0	11.0
WSW			10.0				1	10.0	7.4
W	10.0						1	10.0	1.2
WNW							0	0.0	
NW			10.0				1	10.0	6.5
NNW		10.0					1	10.0	4.5
CALM							0	0.0	
COL. TOTALS	30.0	30.0	30.0	10.0			10		4.9

750 METER LEVEL WINDS AFTERNOON APRIL,1979

DIRECTION	********* WIND SPEEDS	METERS/SECOND	**********	**********	**********	**********	**********	**********	**********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	9.0						1	9.0	.3
ENE							0	0.0	
E			9.0				1	9.0	6.2
ESE	18.1						2	18.1	2.5
SE							0	0.0	
SSE	9.0				9.0		2	18.0	10.7
S							0	0.0	
SSW							0	0.0	
SW		9.0			9.0		2	18.0	10.1
WSW		18.1					2	18.1	4.0
W	9.0						1	9.0	.8
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.1	27.1	9.0		18.0		11		5.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING APRIL,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	10.0						1	10.0	.9
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE			10.0				1	10.0	7.4
SE							0	0.0	
SSE	10.0						1	10.0	.4
S		10.0					1	10.0	4.6
SSW			20.0				2	20.0	7.5
SW							0	0.0	
WSW			10.0				1	10.0	9.3
W			10.0	10.0			2	20.0	10.4
WNW							0	0.0	
NW			10.0				1	10.0	7.7
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	20.0	10.0	60.0	10.0			10		6.6

1000 METER LEVEL WINDS AFTERNOON APRIL,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		11.1					1	11.1	3.6
ENE							0	0.0	
E							0	0.0	
ESE			11.1				1	11.1	7.8
SE		11.1					1	11.1	5.1
SSE						11.1	1	11.1	26.1
S							0	0.0	
SSW	11.1						1	11.1	2.8
SW				11.1			1	11.1	14.6
WSW							0	0.0	
W		22.2					2	22.2	5.6
WNW	11.1						1	11.1	1.1
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	22.2	44.4	11.1	11.1		11.1	9		8.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING APRIL,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	11.1						1	11.1	2.2
ENE							0	0.0	
E				11.1			1	11.1	13.0
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW			22.2				2	22.2	7.8
WSW							0	0.0	
W		11.1					1	11.1	5.1
WNW			11.1	22.2			3	33.3	11.2
NW							0	0.0	
NNW		11.1					1	11.1	3.[illegible]
CALM							0	0.0	
COL. TOTALS	11.1	22.2	33.3	33.3			9		8.1

1500 METER LEVEL WINDS AFTERNOON APRIL,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	12.5						1	12.5	2.2
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE			12.5				1	12.5	9.9
SE							0	0.0	
SSE						12.5	1	12.5	26.3
S			12.5				1	12.5	6.7
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W	12.5						1	12.5	2.3
WNW	12.5	12.5					2	25.0	3.9
NW			12.5				1	12.5	6.6
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	37.5	12.5	37.5			12.5	8		7.9

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2000 METER LEVEL WINDS MORNING APRIL,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND								
N							0	0.0	
NNE				12.5			1	12.5	11.3
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W			12.5				1	12.5	7.5
WNW			25.0	12.5			3	37.5	9.1
NW				12.5			1	12.5	10.1
NNW		12.5	12.5				2	25.0	4.6
CALM							0	0.0	
COL. TOTALS		12.5	50.0	37.5			8		8.2

2000 METER LEVEL WINDS AFTERNOON APRIL,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW			33.3	33.3			2	66.6	10.4
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW			33.3				1	33.3	8.2
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS			66.6	33.3			3		9.7

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*******************************************************************************

        FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
       SURFACE WINDS MORNING          MAY,1979
DIRECTION  ********* WIND SPEEDS METERS/SECOND ****************************
             00.1   03.0   06.0   10.0   16.0  GREATER      ROW  SUMMARY
               TO     TO     TO     TO     TO     THAN    TOTAL    TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0     25.0    COUNT  PERCENT    SPEED

         N           7.6                                      1      7.6      3.6
       NNE   23.0    7.6                                      4     30.6      2.0
        NE                                                    0      0.0
       ENE                                                    0      0.0
         E    7.6                                             1      7.6       .4
       ESE                                                    0      0.0
        SE                                                    0      0.0
       SSE                                                    0      0.0
         S                                                    0      0.0
       SSW    7.6                                             1      7.6       .4
        SW                  7.6                               1      7.6      6.9
       WSW                                                    0      0.0
         W   15.3                                             2     15.3      1.1
       WNW    7.6                                             1      7.6       .3
        NW                                                    0      0.0
       NNW   15.3                                             2     15.3      1.0

      CALM                                                    0      0.0

COL. TOTALS  76.4   15.2    7.6                              13               1.8
       SURFACE WINDS AFTERNOON        MAY,1979
DIRECTION  ********* WIND SPEEDS METERS/SECOND ****************************
             00.1   03.0   06.0   10.0   16.0  GREATER      ROW  SUMMARY
               TO     TO     TO     TO     TO     THAN    TOTAL    TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0     25.0    COUNT  PERCENT    SPEED

         N          10.0                                      1     10.0      3.3
       NNE                                                    0      0.0
        NE                                                    0      0.0
       ENE                                                    0      0.0
         E          10.0                                      1     10.0      4.0
       ESE                                                    0      0.0
        SE   10.0   10.0                                      2     20.0      2.9
       SSE                                                    0      0.0
         S   10.0   10.0                                      2     20.0      3.3
       SSW                        10.0                        1     10.0     10.3
        SW                 10.0                               1     10.0      6.7
       WSW                 10.0                               1     10.0      6.0
         W   10.0                                             1     10.0       .8
       WNW                                                    0      0.0
        NW                                                    0      0.0
       NNW                                                    0      0.0

      CALM                                                    0      0.0

COL. TOTALS  30.0   40.0   20.0   10.0                       10               4.3
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        FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
100 METER LEVEL WINDS MORNING          MAY,1979
DIRECTION  ********* WIND SPEEDS METERS/SECOND ****************************
             00.1   03.0   06.0   10.0   16.0  GREATER      ROW  SUMMARY
               TO     TO     TO     TO     TO     THAN    TOTAL    TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0     25.0    COUNT  PERCENT    SPEED

         N    7.6                                             1      7.6      2.9
       NNE   15.3   23.0                                      5     38.3      3.5
        NE                  7.6                               1      7.6      7.8
       ENE                                                    0      0.0
         E                                                    0      0.0
       ESE    7.6                                             1      7.6       .9
        SE                                                    0      0.0
       SSE    7.6                                             1      7.6      2.6
         S           7.6                                      1      7.6      3.6
       SSW    7.6                                             1      7.6      2.9
        SW                         7.6                        1      7.6     11.5
       WSW    7.6                                             1      7.6       .6
         W                                                    0      0.0
       WNW                                                    0      0.0
        NW                                                    0      0.0
       NNW                                                    0      0.0

      CALM                                                    0      0.0

COL. TOTALS  53.3   30.6    7.6    7.6                       13               3.8
100 METER LEVEL WINDS AFTERNOON        MAY,1979
DIRECTION  ********* WIND SPEEDS METERS/SECOND ****************************
             00.1   03.0   06.0   10.0   16.0  GREATER      ROW  SUMMARY
               TO     TO     TO     TO     TO     THAN    TOTAL    TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0     25.0    COUNT  PERCENT    SPEED

         N                                                    0      0.0
       NNE                                                    0      0.0
        NE   10.0                                             1     10.0       .9
       ENE                                                    0      0.0
         E                                                    0      0.0
       ESE   10.0   10.0                                      2     20.0      2.6
        SE   10.0                 10.0                        2     20.0      5.8
       SSE                                                    0      0.0
         S          10.0                                      1     10.0      3.8
       SSW   10.0                                             1     10.0      1.7
        SW          10.0          10.0                        2     20.0      7.9
       WSW                                                    0      0.0
         W          10.0                                      1     10.0      5.4
       WNW                                                    0      0.0
        NW                                                    0      0.0
       NNW                                                    0      0.0

      CALM                                                    0      0.0

COL. TOTALS  40.0   40.0          20.0                       10               4.4
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING MAY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		7.6	7.6				2	15.2	5.2
NE		7.6	7.6				2	15.2	6.9
ENE	15.3						2	15.3	1.9
E	7.6						1	7.6	.5
ESE							0	0.0	
SE							0	0.0	
SSE			7.6				1	7.6	7.8
S	7.6	7.6					2	15.2	3.0
SSW	7.6	7.6					2	15.2	3.7
SW				7.6			1	7.6	12.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	38.1	30.4	22.8	7.6			13		4.8

200 METER LEVEL WINDS AFTERNOON MAY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E	10.0						1	10.0	2.9
ESE	10.0	10.0					2	20.0	3.1
SE							0	0.0	
SSE	20.0						2	20.0	1.6
S	10.0						1	10.0	1.5
SSW							0	0.0	
SW			10.0				1	10.0	8.7
WSW				10.0			1	10.0	10.2
W			10.0				1	10.0	8.6
WNW							0	0.0	
NW	10.0						1	10.0	2.5
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	60.0	10.0	20.0	10.0			10		4.3

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING MAY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		7.6	7.6				2	15.2	6.3
NE	15.3						2	15.3	1.7
ENE	7.6						1	7.6	2.1
E	7.6						1	7.6	1.1
ESE							0	0.0	
SE	7.6						1	7.6	1.9
SSE	7.6	7.6					2	15.2	3.0
S		15.3					2	15.3	4.5
SSW							0	0.0	
SW		7.6		7.6			2	15.2	9.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.7	38.1	7.6	7.6			13		4.3

300 METER LEVEL WINDS AFTERNOON MAY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	10.0	10.0					2	20.0	2.7
SE	10.0						1	10.0	2.1
SSE	10.0	10.0					2	20.0	4.0
S	10.0						1	10.0	2.2
SSW							0	0.0	
SW				10.0			1	10.0	11.2
WSW			10.0				1	10.0	6.8
W			10.0				1	10.0	6.9
WNW	10.0						1	10.0	2.6
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	50.0	20.0	20.0	10.0			10		4.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING MAY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*********		***************	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			7.6				1	7.6	9.8
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	7.6						1	7.6	2.2
SE	7.6						1	7.6	2.6
SSE		15.3					2	15.3	4.8
S		15.3					2	15.3	4.5
SSW	7.6	7.6					2	15.2	3.5
SW		7.6	7.6	7.6			3	22.8	7.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	7.6						1	7.6	.5
CALM							0	0.0	
COL. TOTALS	30.4	45.8	15.2	7.6			13		4.9

500 METER LEVEL WINDS AFTERNOON MAY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*********		***************	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	10.0						1	10.0	2.1
SE	10.0						1	10.0	2.9
SSE		10.0		10.0			2	20.0	8.3
S		20.0					2	20.0	4.4
SSW							0	0.0	
SW	10.0		10.0				2	20.0	3.5
WSW				10.0			1	10.0	13.7
W			10.0				1	10.0	9.3
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	30.0	30.0	20.0	20.0			10		6.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING MAY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*********		***************	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E	8.3						1	8.3	.6
ESE							0	0.0	
SE		25.0					3	25.0	4.7
SSE		8.3					1	8.3	4.3
S							0	0.0	
SSW		8.3					1	8.3	3.1
SW	25.0		8.3				4	33.3	3.5
WSW			8.3	8.3			2	16.6	9.5
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	33.3	41.6	16.6	8.3			12		4.6

750 METER LEVEL WINDS AFTERNOON MAY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*********		***************	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	10.0						1	10.0	2.3
E							0	0.0	
ESE							0	0.0	
SE	10.0						1	10.0	2.5
SSE	10.0	10.0					2	20.0	2.7
S		20.0					2	20.0	4.2
SSW							0	0.0	
SW		10.0					1	10.0	5.3
WSW			10.0	10.0			2	20.0	10.1
W				10.0			1	10.0	14.3
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	30.0	40.0	10.0	20.0			10		5.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING MAY,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	9.0						1	9.0	2.9
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		9.0					1	9.0	4.0
SSE	9.0						1	9.0	1.3
S							0	0.0	
SSW		9.0					1	9.0	3.3
SW	9.0		9.0				2	18.0	4.9
WSW							0	0.0	
W	9.0	9.0	9.0				3	27.0	4.7
WNW	9.0						1	9.0	.5
NW							0	0.0	
NNW	9.0						1	9.0	1.0
CALM							0	0.0	
COL. TOTALS	54.0	27.0	18.0				11		3.3

1000 METER LEVEL WINDS AFTERNOON MAY,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	10.0						1	10.0	2.1
E							0	0.0	
ESE							0	0.0	
SE	10.0						1	10.0	2.5
SSE			10.0				1	10.0	7.9
S	10.0						1	10.0	.9
SSW		10.0	10.0				2	20.0	5.2
SW		10.0					1	10.0	4.4
WSW			20.0	10.0			3	30.0	10.0
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	30.0	20.0	40.0	10.0			10		5.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING MAY,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW	9.0						1	9.0	2.7
SW							0	0.0	
WSW	9.0	9.0		18.1			4	36.1	7.9
W			9.0	9.0			2	18.0	9.9
WNW	9.0		9.0				2	18.0	4.3
NW		18.1					2	18.1	3.5
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	27.1	18.0	27.1			11		6.3

1500 METER LEVEL WINDS AFTERNOON MAY,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE		11.1					1	11.1	3.6
SE							0	0.0	
SSE			11.1				1	11.1	8.7
S	11.1			11.1			2	22.2	9.3
SSW	11.1						1	11.1	.9
SW				11.1			1	11.1	10.7
WSW		11.1	11.1				2	22.2	6.2
W					11.1		1	11.1	17.4
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	22.2	22.2	22.2	22.2	11.1		9		8.0

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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING        MAY,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ******************************
             00.1   03.0   06.0   10.0   16.0   GREATER      ROW  SUMMARY
              TO     TO     TO     TO     TO     THAN      TOTAL   TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT  SPEED

        N                                                      0    0.0
      NNE                                                      0    0.0
       NE                                                      0    0.0
      ENE                                                      0    0.0
        E                                                      0    0.0
      ESE                                                      0    0.0
       SE                         10.0                         1   10.0      14.1
      SSE                                                      0    0.0
        S                                                      0    0.0
      SSW                                                      0    0.0
       SW                  10.0                                1   10.0       6.7
      WSW                  10.0                                1   10.0       8.2
        W    10.0          10.0                                2   20.0       5.8
      WNW           10.0   10.0   10.0                         3   30.0       8.3
       NW                  10.0   10.0                         2   20.0      10.8
      NNW                                                      0    0.0

     CALM                                                      0    0.0

COL. TOTALS  10.0   10.0   50.0   30.0                        10              8.7

2000 METER LEVEL WINDS AFTERNOON       MAY,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ******************************
             00.1   03.0   06.0   10.0   16.0   GREATER      ROW  SUMMARY
              TO     TO     TO     TO     TO     THAN      TOTAL   TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT  SPEED

        N                                                      0    0.0
      NNE                                                      0    0.0
       NE                                                      0    0.0
      ENE                                                      0    0.0
        E                                                      0    0.0
      ESE                                                      0    0.0
       SE                                                      0    0.0
      SSE                                                      0    0.0
        S           22.2   11.1                                3   33.3       5.2
      SSW                                                      0    0.0
       SW    11.1          11.1                  11.1          3   33.3      11.7
      WSW                         11.1                         1   11.1      13.4
        W                                11.1                  1   11.1      16.3
      WNW                         11.1                         1   11.1      11.2
       NW                                                      0    0.0
      NNW                                                      0    0.0

     CALM                                                      0    0.0

COL. TOTALS  11.1   22.2   22.2   22.2   11.1    11.1          9             10.2
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2500 METER LEVEL WINDS MORNING        MAY,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ******************************
             00.1   03.0   06.0   10.0   16.0   GREATER      ROW  SUMMARY
              TO     TO     TO     TO     TO     THAN      TOTAL   TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT  SPEED

        N                                                      0    0.0
      NNE                                                      0    0.0
       NE                                                      0    0.0
      ENE                                                      0    0.0
        E                                                      0    0.0
      ESE                                                      0    0.0
       SE                                                      0    0.0
      SSE                                                      0    0.0
        S                                                      0    0.0
      SSW                                                      0    0.0
       SW                                                      0    0.0
      WSW                                                      0    0.0
        W                                                      0    0.0
      WNW                                                      0    0.0
       NW                                                      0    0.0
      NNW                                                      0    0.0

     CALM                                                      0    0.0

COL. TOTALS                                                    0

2500 METER LEVEL WINDS AFTERNOON       MAY,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ******************************
             00.1   03.0   06.0   10.0   16.0   GREATER      ROW  SUMMARY
              TO     TO     TO     TO     TO     THAN      TOTAL   TOTAL  AVERAGE
             02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT  SPEED

        N                                                      0    0.0
      NNE                                                      0    0.0
       NE                                                      0    0.0
      ENE                                                      0    0.0
        E                                                      0    0.0
      ESE                                                      0    0.0
       SE                                                      0    0.0
      SSE                                                      0    0.0
        S                  16.6   16.6                         2   33.2      10.4
      SSW                                                      0    0.0
       SW                                                      0    0.0
      WSW                                                      0    0.0
        W    16.6                 33.3                         3   49.9       9.5
      WNW                                16.6                  1   16.6      21.7
       NW                                                      0    0.0
      NNW                                                      0    0.0

     CALM                                                      0    0.0

COL. TOTALS  16.6          16.6   49.9   16.6                  6             11.8
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING JUNE,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE	7.6						1	7.6	1.8
ENE	7.6						1	7.6	1.1
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	7.6						1	7.6	.8
S	15.3						2	15.3	2.6
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W	7.6						1	7.6	1.9
WNW	23.0						3	23.0	.7
NW	15.3						2	15.3	1.4
NNW	7.6						1	7.6	.4
CALM							1	7.0	
COL. TOTALS	91.6						13		1.2

SURFACE WINDS AFTERNOON JUNE,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE			8.3				1	8.3	7.1
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE		8.3					1	8.3	3.1
SE		8.3					1	8.3	4.2
SSE	8.3	8.3	8.3				3	24.9	4.2
S	8.3	8.3					2	16.6	2.4
SSW							0	0.0	
SW		8.3	8.3				2	16.6	5.5
WSW							0	0.0	
W			8.3				1	8.3	6.3
WNW							0	0.0	
NW							0	0.0	
NNW		8.3					1	8.3	3.6
CALM							0	0.0	
COL. TOTALS	16.6	49.8	33.2				12		4.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING JUNE,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N	7.6						1	7.6	2.0
NNE	15.3	7.6					3	22.9	2.4
NE	15.3	7.6					3	22.9	2.8
ENE	7.6						1	7.6	1.7
E	7.6						1	7.6	2.0
ESE	7.6						1	7.6	1.0
SE							0	0.0	
SSE		7.6					1	7.6	4.4
S	7.6						1	7.6	1.9
SSW							0	0.0	
SW			7.6				1	7.6	6.6
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	68.6	22.8	7.6				13		2.7

100 METER LEVEL WINDS AFTERNOON JUNE,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE			8.3				1	8.3	8.5
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	8.3						1	8.3	2.3
SSE	8.3		16.6				3	24.9	4.6
S	8.3	16.6					3	24.9	3.8
SSW							0	0.0	
SW							0	0.0	
WSW		8.3	8.3				2	16.6	5.4
W			8.3				1	8.3	8.1
WNW							0	0.0	
NW	8.3						1	8.3	2.6
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	33.2	24.9	41.5				12		4.8

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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING          JUNE,1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN       TOTAL   TOTAL  AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0       COUNT  PERCENT  SPEED

        N                                                      0      0.0
      NNE            15.3                                      2     15.3      4.1
       NE     7.6     7.6           7.6                        3     22.8      5.9
      ENE                                                      0      0.0
        E                                                      0      0.0
      ESE                                                      0      0.0
       SE                                                      0      0.0
      SSE             7.6    7.6                               2     15.2      4.8
        S     7.6                                              1      7.6      2.1
      SSW    23.0                                              3     23.0      1.1
       SW     7.6                   7.6                        2     15.2      7.1
      WSW                                                      0      0.0
        W                                                      0      0.0
      WNW                                                      0      0.0
       NW                                                      0      0.0
      NNW                                                      0      0.0

     CALM                                                      0      0.0

COL. TOTALS  45.8    30.5    7.6   15.2                       13               4.2

200 METER LEVEL WINDS AFTERNOON        JUNE,1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN       TOTAL   TOTAL  AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0       COUNT  PERCENT  SPEED

        N                                                      0      0.0
      NNE                                                      0      0.0
       NE                           8.3                        1      8.3     13.8
      ENE                                                      0      0.0
        E                                                      0      0.0
      ESE                                                      0      0.0
       SE     8.3                                              1      8.3      2.9
      SSE             8.3    8.3                               2     16.6      7.2
        S     8.3    16.6    8.3                               4     33.2      4.3
      SSW                                                      0      0.0
       SW                                                      0      0.0
      WSW                                  8.3                 1      8.3     16.7
        W     8.3           16.6                               3     24.9      5.9
      WNW                                                      0      0.0
       NW                                                      0      0.0
      NNW                                                      0      0.0

     CALM                                                      0      0.0

COL. TOTALS  24.9    24.9   33.2    8.3    8.3                12               6.5
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING          JUNE,1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN       TOTAL   TOTAL  AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0       COUNT  PERCENT  SPEED

        N                                                      0      0.0
      NNE    15.3                                              2     15.3      2.4
       NE             7.6                                      1      7.6      3.8
      ENE             7.6                                      1      7.6      5.8
        E                                                      0      0.0
      ESE                                                      0      0.0
       SE                                                      0      0.0
      SSE     7.6    15.3   15.3                               5     38.2      5.3
        S                                                      0      0.0
      SSW             7.6                                      1      7.6      3.5
       SW     7.6            7.6                               2     15.2      5.8
      WSW     7.6                                              1      7.6       .4
        W                                                      0      0.0
      WNW                                                      0      0.0
       NW                                                      0      0.0
      NNW                                                      0      0.0

     CALM                                                      0      0.0

COL. TOTALS  38.1    38.1   22.9                              13               4.3

300 METER LEVEL WINDS AFTERNOON        JUNE,1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN       TOTAL   TOTAL  AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0       COUNT  PERCENT  SPEED

        N                                                      0      0.0
      NNE             8.3                                      1      8.3      5.4
       NE                                                      0      0.0
      ENE                                                      0      0.0
        E                                                      0      0.0
      ESE                                                      0      0.0
       SE             8.3                                      1      8.3      4.0
      SSE             8.3    8.3    8.3                        3     24.9      7.0
        S     8.3     8.3    8.3                               3     24.9      4.2
      SSW                                                      0      0.0
       SW                                                      0      0.0
      WSW                    8.3                               1      8.3      9.2
        W             8.3   16.6                               3     24.9      5.5
      WNW                                                      0      0.0
       NW                                                      0      0.0
      NNW                                                      0      0.0

     CALM                                                      0      0.0

COL. TOTALS   8.3    41.5   41.5    8.3                       12               5.7
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING JUNE,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					**************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE		7.6					1	7.6	4.7
SE		7.6	7.6				2	15.2	6.2
SSE	7.6			7.6			2	15.2	7.8
S		15.3					2	15.3	4.1
SSW	15.3	7.6					3	22.9	2.1
SW				7.6			1	7.6	12.3
WSW	7.6						1	7.6	2.8
W							0	0.0	
WNW	7.6						1	7.6	1.4
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	38.1	38.1	7.6	15.2			13		4.9

500 METER LEVEL WINDS AFTERNOON JUNE,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					**************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			8.3				1	8.3	8.6
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE			8.3				1	8.3	6.5
SSE	8.3	16.6	8.3				4	33.2	4.3
S		16.6					2	16.6	4.0
SSW							0	0.0	
SW							0	0.0	
WSW		16.6					2	16.6	5.2
W		8.3	8.3				2	16.6	6.9
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	8.3	58.1	33.2				12		5.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING JUNE,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					**************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE		7.6					1	7.6	5.3
E							0	0.0	
ESE							0	0.0	
SE		7.6					1	7.6	3.0
SSE	15.3	7.6					3	22.9	2.1
S		23.0	7.6				4	30.6	4.5
SSW			7.6				1	7.6	8.4
SW		7.6					1	7.6	3.9
WSW					7.6		1	7.6	20.4
W		7.6					1	7.6	5.4
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	15.3	61.0	15.2		7.6		13		5.4

750 METER LEVEL WINDS AFTERNOON JUNE,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					**************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		9.0					1	9.0	4.6
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	9.0	9.0					2	18.0	2.3
SSE		9.0	9.0				2	18.0	7.6
S		18.1					2	18.1	3.9
SSW		9.0					1	9.0	3.4
SW							0	0.0	
WSW				18.1			2	18.1	12.3
W		9.0					1	9.0	5.4
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	9.0	63.1	9.0	18.1			11		5.9

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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING         JUNE,1979

  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN      TOTAL    TOTAL   AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT   SPEED

          N                                                     0      0.0
        NNE                                                     0      0.0
         NE                  7.6                                1      7.6     7.0
        ENE                                                     0      0.0
          E                                                     0      0.0
        ESE                                                     0      0.0
         SE           7.6                                       1      7.6     5.9
        SSE                                                     0      0.0
          S    7.6   15.3                                       3     22.9     3.9
        SSW                                                     0      0.0
         SW                 15.3                                2     15.3     8.7
        WSW    7.6    7.6    7.6    7.6                         4     30.4     6.3
          W           7.6    7.6                                2     15.2     5.8
        WNW                                                     0      0.0
         NW                                                     0      0.0
        NNW                                                     0      0.0

   CALM                                                         0      0.0

COL. TOTALS   15.2   38.1   38.1    7.6                        13              6.1

1000 METER LEVEL WINDS AFTERNOON       JUNE,1979

  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN      TOTAL    TOTAL   AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT   SPEED

          N                                                     0      0.0
        NNE                                                     0      0.0
         NE                  9.0                                1      9.0     7.1
        ENE                                                     0      0.0
          E                                                     0      0.0
        ESE                                                     0      0.0
         SE    9.0                                              1      9.0     2.7
        SSE                                                     0      0.0
          S           9.0                                       1      9.0     3.2
        SSW    9.0                                              1      9.0     2.2
         SW          18.1           9.0                         3     27.1     6.6
        WSW   18.1    9.0           9.0                         4     36.1     6.3
          W                                                     0      0.0
        WNW                                                     0      0.0
         NW                                                     0      0.0
        NNW                                                     0      0.0

   CALM                                                         0      0.0

COL. TOTALS   36.1   36.1    9.0   18.0                        11              5.4
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING         JUNE,1979

  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN      TOTAL    TOTAL   AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT   SPEED

          N                                                     0      0.0
        NNE                 10.0                                1     10.0     9.3
         NE                                                     0      0.0
        ENE                                                     0      0.0
          E                                                     0      0.0
        ESE                                                     0      0.0
         SE                 10.0                                1     10.0     7.8
        SSE                                                     0      0.0
          S   10.0                                              1     10.0     1.3
        SSW                                                     0      0.0
         SW   10.0          20.0                                3     30.0     6.7
        WSW                               10.0                  1     10.0    21.2
          W          10.0                                       1     10.0     5.2
        WNW                 10.0                                1     10.0     6.5
         NW                 10.0                                1     10.0     8.0
        NNW                                                     0      0.0

   CALM                                                         0      0.0

COL. TOTALS   20.0   10.0   60.0          10.0                 10              7.9

1500 METER LEVEL WINDS AFTERNOON       JUNE,1979

  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1   03.0   06.0   10.0   16.0   GREATER      ROW   SUMMARY
               TO     TO     TO     TO     TO     THAN      TOTAL    TOTAL   AVERAGE
              02.9   05.9   09.9   15.9   25.0    25.0      COUNT  PERCENT   SPEED

          N                                                     0      0.0
        NNE                                                     0      0.0
         NE                                                     0      0.0
        ENE          10.0                                       1     10.0     3.6
          E                                                     0      0.0
        ESE                                                     0      0.0
         SE                                                     0      0.0
        SSE                                                     0      0.0
          S   10.0                                              1     10.0     2.7
        SSW                 10.0                                1     10.0     6.2
         SW                               10.0                  1     10.0    20.3
        WSW          10.0                 10.0                  2     20.0    11.8
          W          10.0   10.0                                2     20.0     5.7
        WNW                 10.0                                1     10.0     6.4
         NW                                                     0      0.0
        NNW   10.0                                              1     10.0      .5

   CALM                                                         0      0.0

COL. TOTALS   20.0   30.0   30.0          20.0                 10              7.5
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         FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING          JUNE,1979
DIRECTION    ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL   AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT   SPEED

           N                                            0      0.0
         NNE                         16.6                           1     16.6     7.2
          NE                                            0      0.0
         ENE                                            0      0.0
           E                   16.6                                 1     16.6     5.0
         ESE                                            0      0.0
          SE                                            0      0.0
         SSE                                            0      0.0
           S                                            0      0.0
         SSW                                            0      0.0
          SW                                            16.6        1     16.6    32.7
         WSW   16.6                                                 1     16.6     2.6
           W                                            0      0.0
         WNW                         33.3                           2     33.3     7.0
          NW                                            0      0.0
         NNW                                            0      0.0

        CALM                                            0      0.0

COL. TOTALS  16.6  16.6  49.9              16.6        6               10.2
2000 METER LEVEL WINDS AFTERNOON        JUNE,1979
DIRECTION    ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL   AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT   SPEED

           N                                            0      0.0
         NNE                                            0      0.0
          NE                                            0      0.0
         ENE                   11.1                                 1     11.1     4.0
           E                                            0      0.0
         ESE                                            0      0.0
          SE                                            0      0.0
         SSE                                            0      0.0
           S                                            0      0.0
         SSW                                            0      0.0
          SW                                            11.1        1     11.1    42.8
         WSW                   11.1  44.4                           5     55.5     7.8
           W                   11.1                                 1     11.1     3.7
         WNW                                            0      0.0
          NW   11.1                                                 1     11.1      .7
         NNW                                            0      0.0

        CALM                                            0      0.0

COL. TOTALS  11.1  33.3  44.4              11.1        9               10.0
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         FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2500 METER LEVEL WINDS MORNING          JUNE,1979
DIRECTION    ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL   AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT   SPEED

           N                                            0      0.0
         NNE                                            0      0.0
          NE                                            0      0.0
         ENE                                            0      0.0
           E                                            0      0.0
         ESE                                            0      0.0
          SE                                            0      0.0
         SSE                                            0      0.0
           S                                            0      0.0
         SSW                                            0      0.0
          SW                                            0      0.0
         WSW                                            0      0.0
           W                                            0      0.0
         WNW                                            0      0.0
          NW                                            0      0.0
         NNW                                            0      0.0

        CALM                                            0      0.0

COL. TOTALS                                             0
2500 METER LEVEL WINDS AFTERNOON        JUNE,1979
DIRECTION    ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL   AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT   SPEED

           N                                            0      0.0
         NNE                                            0      0.0
          NE                                            0      0.0
         ENE                                            0      0.0
           E                   14.2                                 1     14.2     3.0
         ESE                                            0      0.0
          SE                                            0      0.0
         SSE                                            0      0.0
           S                                            0      0.0
         SSW                                            0      0.0
          SW                               28.5                     2     28.5    11.6
         WSW                                            0      0.0
           W                               28.5                     2     28.5    11.3
         WNW                         14.2  14.2                     2     28.4     8.5
          NW                                            0      0.0
         NNW                                            0      0.0

        CALM                                            0      0.0

COL. TOTALS        14.2  14.2  71.2                    7                9.4
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******************************************************************************************

          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
       SURFACE WINDS MORNING         JULY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

       N    23.0   7.6                                   4    30.6     2.3
     NNE           15.3                                  2    15.3     4.6
      NE                                                 0     0.0
     ENE                                                 0     0.0
       E                                                 0     0.0
     ESE                                                 0     0.0
      SE    15.3                                         2    15.3     1.9
     SSE                                                 0     0.0
       S                                                 0     0.0
     SSW                                                 0     0.0
      SW                                                 0     0.0
     WSW                                                 0     0.0
       W                                                 0     0.0
     WNW                                                 0     0.0
      NW    15.3                                         2    15.3     1.8
     NNW     7.6   7.6                                   2    15.2     3.4

    CALM                                                 1     7.0

:OL. TOTALS 61.2  30.5                                  13             2.5
       SURFACE WINDS AFTERNOON       JULY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

       N                                                 0     0.0
     NNE     7.6                                         1     7.6     1.8
      NE                                                 0     0.0
     ENE                                                 0     0.0
       E                                                 0     0.0
     ESE                                                 0     0.0
      SE    15.3        15.3                             4    30.6     4.0
     SSE     7.6   7.6   7.6                             3    22.8     4.5
       S     7.6                                         1     7.6     1.8
     SSW     7.6   7.6                                   2    15.2     2.9
      SW           7.6                                   1     7.6     4.5
     WSW                                                 0     0.0
       W                                                 0     0.0
     WNW                                                 0     0.0
      NW                                                 0     0.0
     NNW           7.6                                   1     7.6     5.4

    CALM                                                 0     0.0

:OL. TOTALS 45.7  30.4  22.9                            13             3.7
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
100 METER LEVEL WINDS MORNING        JULY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

       N                15.3                             2    15.3     6.1
     NNE    15.3  23.0   7.6                             6    45.9     4.1
      NE          15.3   7.6                             3    22.9     6.2
     ENE                                                 0     0.0
       E                                                 0     0.0
     ESE                                                 0     0.0
      SE                                                 0     0.0
     SSE           7.6                                   1     7.6     4.1
       S                                                 0     0.0
     SSW                                                 0     0.0
      SW                                                 0     0.0
     WSW                                                 0     0.0
       W     7.6                                         1     7.6     1.5
     WNW                                                 0     0.0
      NW                                                 0     0.0
     NNW                                                 0     0.0

    CALM                                                 0     0.0

COL. TOTALS 22.9  45.9  30.5                            13             4.7
100 METER LEVEL WINDS AFTERNOON      JULY,1979
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

       N                                                 0     0.0
     NNE                                                 0     0.0
      NE                                                 0     0.0
     ENE                                                 0     0.0
       E                                                 0     0.0
     ESE     7.6                                         1     7.6      .7
      SE     7.6   7.6                                   2    15.2     2.1
     SSE    15.3  15.3                                   4    30.6     3.4
       S     7.6         7.6                             2    15.2     5.0
     SSW     7.6   7.6                                   2    15.2     2.8
      SW                                                 0     0.0
     WSW           7.6                                   1     7.6     5.9
       W                                                 0     0.0
     WNW                                                 0     0.0
      NW                                                 0     0.0
     NNW                 7.6                             1     7.6     7.0

    CALM                                                 0     0.0

COL. TOTALS 45.7  38.1  15.2                            13             3.6
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			30.7				4	30.7	7.0
NE		23.0	15.3				5	38.3	5.8
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	7.6						1	7.6	2.9
SSE							0	0.0	
S		15.3					2	15.3	4.5
SSW		7.6					1	7.6	4.7
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	7.6	45.9	46.0				13		5.7

200 METER LEVEL WINDS AFTERNOON JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	23.0						3	23.0	1.6
SSE	7.6	7.6	15.3				4	30.5	5.5
S	7.6	7.6					2	15.2	3.4
SSW	7.6	7.6					2	15.2	2.9
SW							0	0.0	
WSW		7.6					1	7.6	4.1
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW			7.6				1	7.6	9.1
CALM							0	0.0	
COL. TOTALS	45.8	30.4	22.9				13		4.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			30.7				4	30.7	7.3
NE		7.6					1	7.6	4.2
ENE	23.0						3	23.0	2.1
E	7.6						1	7.6	1.8
ESE	7.6						1	7.6	.8
SE							0	0.0	
SSE		15.3					2	15.3	5.0
S							0	0.0	
SSW			7.6				1	7.6	6.4
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	38.2	22.9	38.3				13		4.5

300 METER LEVEL WINDS AFTERNOON JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					***************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		7.6					1	7.6	3.0
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	7.6						1	7.6	2.5
SE	7.6						1	7.6	2.7
SSE	7.6	7.6	15.3				4	30.5	6.2
S		15.3	7.6				3	22.9	6.0
SSW	7.6	7.6					2	15.2	2.3
SW							0	0.0	
WSW							0	0.0	
W	7.6						1	7.6	2.8
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	38.0	38.1	22.9				13		4.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		7.6	15.3				3	22.9	7.1
NE	7.6		7.6				2	15.2	4.1
ENE	7.6						1	7.6	2.8
E		7.6					1	7.6	4.1
ESE	15.3						2	15.3	1.9
SE							0	0.0	
SSE							0	0.0	
S		15.3					2	15.3	3.4
SSW		7.6					1	7.6	5.5
SW							0	0.0	
WSW	7.6						1	7.6	.6
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	38.1	38.1	22.9				13		4.1

500 METER LEVEL WINDS AFTERNOON JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	7.6						1	7.6	1.8
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	15.3	7.6					3	22.9	2.8
SSE		7.6		7.6			2	15.2	8.4
S		15.3					2	15.3	5.0
SSW		7.6	7.6				2	15.2	6.6
SW							0	0.0	
WSW		15.3					2	15.3	3.2
W							0	0.0	
WNW	7.6						1	7.6	1.5
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	30.5	53.4	7.6	7.6			13		4.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	15.3						2	15.3	2.0
ENE	7.6						1	7.6	1.3
E	7.6						1	7.6	1.9
ESE	7.6						1	7.6	2.9
SE							0	0.0	
SSE			7.6				1	7.6	6.3
S							0	0.0	
SSW							0	0.0	
SW	7.6	15.3	7.6				4	30.5	4.0
WSW							0	0.0	
W							0	0.0	
WNW	7.6						1	7.6	2.3
NW		7.6					1	7.6	4.0
NNW	7.6						1	7.6	1.8
CALM							0	0.0	
COL. TOTALS	60.9	22.9	15.2				13		3.1

750 METER LEVEL WINDS AFTERNOON JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		16.6					2	16.6	3.4
SSE	16.6				8.3		3	24.9	8.3
S		8.3					1	8.3	3.6
SSW	8.3		8.3				2	16.6	4.8
SW							0	0.0	
WSW							0	0.0	
W	8.3	8.3					2	16.6	3.2
WNW	8.3						1	8.3	1.9
NW							0	0.0	
NNW	8.3						1	8.3	2.4
CALM							0	0.0	
COL. TOTALS	49.8	33.2	8.3		8.3		12		4.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	7.6						1	7.6	1.2
NNE		7.6					1	7.6	3.5
NE							0	0.0	
ENE							0	0.0	
E	7.6						1	7.6	2.0
ESE	7.6	7.6					2	15.2	2.7
SE		7.6					1	7.6	4.1
SSE		15.3					2	15.3	3.7
S							0	0.0	
SSW							0	0.0	
SW		7.6	7.6				2	15.2	7.4
WSW							0	0.0	
W		7.6					1	7.6	4.1
WNW	7.6	7.6					2	15.2	3.1
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	30.4	60.9	7.6				13		3.7

1000 METER LEVEL WINDS AFTERNOON JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		8.3					1	8.3	5.9
SSE	8.3	8.3					2	16.6	4.1
S	8.3		8.3				2	16.6	4.4
SSW		8.3	8.3				2	16.6	6.5
SW	16.6						2	16.6	.9
WSW		8.3	8.3				2	16.6	6.5
W							0	0.0	
WNW							0	0.0	
NW	8.3						1	8.3	2.2
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	41.5	33.2	24.9				12		4.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		7.6					1	7.6	4.3
ENE							0	0.0	
E							0	0.0	
ESE		7.6	7.6				2	15.2	5.2
SE		15.3					2	15.3	4.6
SSE							0	0.0	
S		7.6					1	7.6	3.5
SSW							0	0.0	
SW				7.6			1	7.6	10.6
WSW		7.6					1	7.6	3.9
W		7.6	7.6				2	15.2	6.4
WNW			15.3				2	15.3	6.7
NW							0	0.0	
NNW	7.6						1	7.6	2.1
CALM							0	0.0	
COL. TOTALS	7.6	53.3	30.5	7.6			13		5.4

1500 METER LEVEL WINDS AFTERNOON JULY,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E	9.0						1	9.0	2.0
ESE							0	0.0	
SE		9.0					1	9.0	3.3
SSE	9.0						1	9.0	2.0
S		9.0	9.0	9.0			3	27.0	7.7
SSW					9.0		1	9.0	19.1
SW							0	0.0	
WSW							0	0.0	
W			9.0				1	9.0	6.7
WNW							0	0.0	
NW		18.1					2	18.1	4.2
NNW	9.0						1	9.0	1.9
CALM							0	0.0	
COL. TOTALS	27.0	36.1	18.0	9.0	9.0		11		6.0

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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING         JULY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
                TO    TO    TO    TO    TO    THAN       TOTAL    TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

        N                                                    0      0.0
      NNE                                                    0      0.0
       NE                                                    0      0.0
      ENE                                                    0      0.0
        E                                                    0      0.0
      ESE                         8.3                        1      8.3     15.5
       SE            8.3                                     1      8.3      3.8
      SSE            8.3                                     1      8.3      4.6
        S                                                    0      0.0
      SSW                  8.3                               1      8.3      6.0
       SW       8.3 16.6                                     3     24.9      3.3
      WSW            8.3                                     1      8.3      3.6
        W            8.3                                     1      8.3      3.1
      WNW            8.3          8.3                        2     16.6      6.8
       NW                                                    0      0.0
      NNW       8.3                                          1      8.3      2.2

    CALM                                                     0      0.0

COL. TOTALS    16.6 58.1   8.3  16.6                        12               5.2
2000 METER LEVEL WINDS AFTERNOON       JULY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
                TO    TO    TO    TO    TO    THAN       TOTAL    TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

        N       9.0                                          1      9.0      1.6
      NNE                                                    0      0.0
       NE                                                    0      0.0
      ENE                                                    0      0.0
        E                                                    0      0.0
      ESE                                                    0      0.0
       SE                                                    0      0.0
      SSE      18.1                                          2     18.1      1.4
        S            9.0   9.0                               2     18.0      5.6
      SSW                                                    0      0.0
       SW       9.0               9.0   9.0                  3     27.0      9.9
      WSW                                                    0      0.0
        W                 18.1                               2     18.1      7.9
      WNW            9.0                                     1      9.0      3.2
       NW                                                    0      0.0
      NNW                                                    0      0.0

    CALM                                                     0      0.0

COL. TOTALS    36.1 18.0  27.1   9.0   9.0                  11               5.8
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2500 METER LEVEL WINDS MORNING         JULY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
                TO    TO    TO    TO    TO    THAN       TOTAL    TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

        N                                                    0      0.0
      NNE                                                    0      0.0
       NE                                                    0      0.0
      ENE                                                    0      0.0
        E                                                    0      0.0
      ESE                                                    0      0.0
       SE                                                    0      0.0
      SSE                                                    0      0.0
        S                                                    0      0.0
      SSW                                                    0      0.0
       SW                                                    0      0.0
      WSW                                                    0      0.0
        W                                                    0      0.0
      WNW                                                    0      0.0
       NW                                                    0      0.0
      NNW                                                    0      0.0

    CALM                                                     0      0.0

COL. TOTALS                                                  0
2500 METER LEVEL WINDS AFTERNOON       JULY,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
               00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
                TO    TO    TO    TO    TO    THAN       TOTAL    TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

        N            9.0                                     1      9.0      4.6
      NNE                                                    0      0.0
       NE                                                    0      0.0
      ENE                                                    0      0.0
        E                                                    0      0.0
      ESE                                                    0      0.0
       SE                                                    0      0.0
      SSE                                                    0      0.0
        S                                                    0      0.0
      SSW                  9.0                               1      9.0      6.8
       SW            9.0   9.0          9.0                  3     27.0     11.5
      WSW                         9.0                        1      9.0     12.6
        W                  9.0    9.0                        2     18.0     10.1
      WNW            9.0                                     1      9.0      5.3
       NW       9.0                                          1      9.0      2.6
      NNW            9.0                                     1      9.0      4.1

    CALM                                                     0      0.0

COL. TOTALS     9.0 36.0  27.0  18.0   9.0                  11               8.2
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING   AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL CCUNT	SUMMARY TCTAL PERCENT	AVERAGE SPEED
N	8.3	8.3					2	16.6	2.8
NNE	25.0						3	25.0	.9
NE							0	0.0	
ENE							0	0.0	
E	8.3						1	8.3	.7
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW			8.3				1	8.3	7.1
WSW							0	0.0	
W	8.3						1	8.3	1.6
WNW							0	0.0	
NW	8.3	8.3					2	16.6	2.0
NNW	8.3						1	8.3	.9
CALM							1	8.0	
COL. TOTALS	66.5	16.6	8.3				12		1.9

SURFACE WINDS AFTERNOON   AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TC 25.0	GREATER THAN 25.0	ROW TCTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	9.0						1	9.0	1.1
NNE							0	0.0	
NE							0	0.0	
ENE		9.0					1	9.0	5.8
E		9.0					1	9.0	4.5
ESE	18.1						2	18.1	1.2
SE		9.0					1	9.0	4.9
SSE		18.1					2	18.1	4.1
S		9.0					1	9.0	4.9
SSW	9.0						1	9.0	1.1
SW			9.0				1	9.0	6.3
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	36.1	54.1	9.0				11		3.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING   AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TU 02.9	03.0 TO 05.9	06.0 TU 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TCTAL COUNT	SUMMARY TCTAL PERCENT	AVERAGE SPEED
N	16.6	16.6					4	33.2	3.0
NNE	8.3	16.6	16.6				5	41.5	4.8
NE		8.3					1	8.3	3.7
ENE							0	0.0	
E							0	0.0	
ESE	8.3						1	8.3	1.6
SE							0	0.0	
SSE	8.3						1	8.3	1.3
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	41.5	41.5	16.6				12		3.6

100 METER LEVEL WINDS AFTERNOON   AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E			9.0				1	9.0	7.9
ESE							0	0.0	
SE	18.1	9.0					3	27.1	3.1
SSE	9.0		9.0				2	18.0	3.8
S	9.0		9.0				2	18.0	3.8
SSW			9.0				1	9.0	6.4
SW							0	0.0	
WSW			9.0				1	9.0	8.2
W							0	0.0	
WNW	9.0						1	9.0	1.9
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.1	9.0	45.0				11		4.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		8.3					1	8.3	3.9
NNE			16.6				2	16.6	8.2
NE		8.3		8.3			2	16.6	7.6
ENE	8.3	8.3					2	16.6	2.9
E							0	0.0	
ESE	8.3						1	8.3	1.9
SE		8.3					1	8.3	4.5
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW		8.3					1	8.3	4.2
WSW							0	0.0	
W							0	0.0	
WNW		8.3					1	8.3	4.7
NW							0	0.0	
NNW		8.3					1	8.3	3.6
CALM							0	0.0	
COL. TOTALS	16.6	58.1	16.5	8.3			12		5.0

200 METER LEVEL WINDS AFTERNOON AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E				9.0			1	9.0	11.4
ESE							0	0.0	
SE	9.0		9.0				2	18.0	5.0
SSE	18.1						2	18.1	1.4
S	9.0		18.1				3	27.1	5.0
SSW		9.0					1	9.0	3.9
SW							0	0.0	
WSW			9.0				1	9.0	9.3
W							0	0.0	
WNW	9.0						1	9.0	1.9
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.1	9.0	36.1	9.0			11		4.9

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		8.3					1	8.3	4.6
NNE			16.6				2	16.6	7.4
NE		8.3		8.3			2	16.6	7.0
ENE		8.3					1	8.3	5.0
E							0	0.0	
ESE		8.3					1	8.3	5.3
SE	8.3						1	8.3	1.7
SSE		8.3					1	8.3	4.0
S							0	0.0	
SSW	8.3						1	8.3	2.1
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW			8.3				1	8.3	7.5
NW							0	0.0	
NNW	8.3						1	8.3	1.7
CALM							0	0.0	
COL. TOTALS	24.9	41.5	24.9	8.3			12		5.0

300 METER LEVEL WINDS AFTERNOON AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E	9.0			9.0			2	18.0	6.4
ESE							0	0.0	
SE	18.1						2	18.1	1.4
SSE			27.2				3	27.2	8.0
S	18.1		9.0				3	27.1	2.9
SSW							0	0.0	
SW							0	0.0	
WSW				9.0			1	9.0	11.2
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.2		36.2	18.0			11		5.4

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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
500 METER LEVEL WINDS MORNING       AUGUST,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN    TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N                                                 0    0.0
      NNE                                                 0    0.0
       NE                  8.3                            1    8.3    9.7
      ENE       8.3   8.3                                 2   16.6    3.5
        E                                                 0    0.0
      ESE       8.3                                       1    8.3    1.1
       SE                  8.3                            1    8.3    7.5
      SSE             8.3                                 1    8.3    5.7
        S       8.3                                       1    8.3    2.5
      SSW      16.6   8.3                                 3   24.9    2.8
       SW                                                 0    0.0
      WSW                                                 0    0.0
        W                                                 0    0.0
      WNW                  8.3                            1    8.3    6.9
       NW                                                 0    0.0
      NNW       8.3                                       1    8.3    1.8

     CALM                                                 0    0.0

COL. TOTALS   49.8  24.9  24.9                           12           4.2
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500 METER LEVEL WINDS AFTERNOON     AUGUST,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN    TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N       9.0                                       1    9.0     .4
      NNE                                                 0    0.0
       NE                                                 0    0.0
      ENE                                                 0    0.0
        E                        9.0                      1    9.0   12.6
      ESE                                                 0    0.0
       SE       9.0   9.0                                 2   18.0    1.8
      SSE                  9.0                            1    9.0    6.2
        S                 18.1                            2   18.1    7.8
      SSW       9.0                                       1    9.0     .8
       SW       9.0   9.0                                 2   18.0    3.6
      WSW                        9.0                      1    9.0   10.7
        W                                                 0    0.0
      WNW                                                 0    0.0
       NW                                                 0    0.0
      NNW                                                 0    0.0

     CALM                                                 0    0.0

COL. TOTALS   36.0  18.0  27.1  18.0                     11           5.2
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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
750 METER LEVEL WINDS MORNING       AUGUST,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN    TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N                                                 0    0.0
      NNE                                                 0    0.0
       NE       8.3                                       1    8.3    2.9
      ENE                                                 0    0.0
        E             8.3                                 1    8.3    3.6
      ESE                                                 0    0.0
       SE                                                 0    0.0
      SSE             8.3   8.3                           2   16.6    7.1
        S       8.3   8.3                                 2   16.6    2.5
      SSW             8.3   8.3                           2   16.6    5.3
       SW             8.3   8.3                           2   16.6    5.4
      WSW                                                 0    0.0
        W                                                 0    0.0
      WNW                                                 0    0.0
       NW             8.3                                 1    8.3    4.6
      NNW       8.3                                       1    8.3    2.6

     CALM                                                 0    0.0

COL. TOTALS   24.9  49.8  24.9                           12           4.5
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750 METER LEVEL WINDS AFTERNOON     AUGUST,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN    TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0    COUNT PERCENT  SPEED

        N       9.0                                       1    9.0    1.5
      NNE                                                 0    0.0
       NE                                                 0    0.0
      ENE                                                 0    0.0
        E                  9.0                            1    9.0    9.8
      ESE                                                 0    0.0
       SE                                                 0    0.0
      SSE       9.0   9.0                                 2   18.0    2.8
        S                                                 0    0.0
      SSW       9.0         9.0                           2   18.0    4.7
       SW      18.1                                       2   18.1    2.5
      WSW             9.0  18.1                           3   27.1    6.6
        W                                                 0    0.0
      WNW                                                 0    0.0
       NW                                                 0    0.0
      NNW                                                 0    0.0

     CALM                                                 0    0.0

COL. TOTALS   45.1  18.0  36.1                           11           4.6
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	8.3						1	8.3	2.1
E							0	0.0	
ESE	8.3	16.6					3	24.9	2.7
SE	8.3						1	8.3	2.5
SSE			8.3				1	8.3	8.9
S							0	0.0	
SSW		8.3					1	8.3	4.6
SW			8.3				1	8.3	9.4
WSW		16.6					2	16.6	3.3
W							0	0.0	
WNW							0	0.0	
NW	8.3						1	8.3	1.6
NNW		8.3					1	8.3	4.7
CALM							0	0.0	
COL. TOTALS	33.2	49.8	16.6				12		4.0

1000 METER LEVEL WINDS AFTERNOON AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	9.0						1	9.0	2.4
NE							0	0.0	
ENE			9.0				1	9.0	9.0
E							0	0.0	
ESE							0	0.0	
SE	9.0	9.0					2	18.0	3.6
SSE							0	0.0	
S							0	0.0	
SSW			9.0				1	9.0	8.8
SW	18.1		9.0				3	27.1	4.2
WSW	9.0			9.0			2	18.0	8.3
W			9.0				1	9.0	6.2
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.1	9.0	36.0	9.0			11		5.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		10.0					1	10.0	4.4
NE	10.0						1	10.0	.6
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	10.0		10.0				2	20.0	4.9
S							0	0.0	
SSW							0	0.0	
SW	10.0						1	10.0	2.1
WSW	10.0		10.0	10.0			3	30.0	7.9
W		10.0					1	10.0	4.2
WNW							0	0.0	
NW							0	0.0	
NNW		10.0					1	10.0	3.4
CALM							0	0.0	
COL. TOTALS	40.0	30.0	20.0	10.0			10		4.8

1500 METER LEVEL WINDS AFTERNOON AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E				9.0			1	9.0	13.2
ESE	9.0						1	9.0	1.2
SE	9.0						1	9.0	1.1
SSE			9.0				1	9.0	8.6
S							0	0.0	
SSW							0	0.0	
SW	9.0		9.0				2	18.0	5.3
WSW		9.0		18.1			3	27.1	9.2
W							0	0.0	
WNW		9.0					1	9.0	4.9
NW		9.0					1	9.0	3.5
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	27.0	18.0	27.1			11		6.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2000 METER LEVEL WINDS MORNING AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE				11.1			1	11.1	10.5
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE		11.1					1	11.1	3.2
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW	11.1						1	11.1	1.6
SW			11.1				1	11.1	7.8
WSW							0	0.0	
W			22.2				2	22.2	6.7
WNW	11.1		11.1				2	22.2	3.9
NW			11.1				1	11.1	9.7
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	22.2	11.1	55.5	11.1			9		6.0

2000 METER LEVEL WINDS AFTERNOON AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	10.0	10.0					2	20.0	4.0
SE							0	0.0	
SSE							0	0.0	
S		10.0					1	10.0	3.8
SSW							0	0.0	
SW		10.0	10.0	10.0			3	30.0	6.9
WSW		10.0		10.0			2	20.0	8.2
W				10.0			1	10.0	14.3
WNW		10.0					1	10.0	4.1
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	10.0	50.0	10.0	30.0			10		6.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2500 METER LEVEL WINDS MORNING AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

2500 METER LEVEL WINDS AFTERNOON AUGUST,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE		11.1					1	11.1	4.5
SE							0	0.0	
SSE							0	0.0	
S		11.1					1	11.1	4.7
SSW		11.1					1	11.1	3.4
SW			11.1				1	11.1	8.8
WSW			22.2	22.2			4	44.4	9.4
W			11.1				1	11.1	9.5
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		33.3	44.4	22.2			9		7.6

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      FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
    SURFACE WINDS MORNING   SEPTEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ******************************
               00.1   03.0   06.0   10.0   16.0  GREATER     ROW  SUMMARY
                TO     TO     TO     TO     TO      THAN    TOTAL    TOTAL  AVERAGE
               02.9   05.9   09.9   15.9   25.0     25.0   COUNT  PERCENT    SPEED

           N    5.5                                            1      5.5       .4
         NNE    5.5    5.5    5.5                              3     16.5      3.7
          NE    5.5                                            1      5.5      1.8
         ENE                                                   0      0.0
           E                                                   0      0.0
         ESE                                                   0      0.0
          SE                                                   0      0.0
         SSE                                                   0      0.0
           S    5.5    5.5                                     2     11.0      3.3
         SSW                                                   0      0.0
          SW                                                   0      0.0
         WSW                                                   0      0.0
           W                                                   0      0.0
         WNW   11.1                                            2     11.1      1.0
          NW    5.5    5.5                                     2     11.0      2.1
         NNW   11.1    5.5                                     3     16.6      2.7

  CALM                                                         4     22.0

COL. TOTALS    49.7   22.0    5.5                             18               1.9
    SURFACE WINDS AFTERNOON SEPTEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ******************************
               00.1   03.0   06.0   10.0   16.0  GREATER     ROW  SUMMARY
                TO     TO     TO     TO     TO      THAN    TOTAL    TOTAL  AVERAGE
               02.9   05.9   09.9   15.9   25.0     25.0   COUNT  PERCENT    SPEED

           N          10.0                                     1     10.0      3.6
         NNE   10.0                                            1     10.0      1.1
          NE                                                   0      0.0
         ENE                                                   0      0.0
           E   10.0                                            1     10.0      1.8
         ESE                                                   0      0.0
          SE   10.0   20.0                                     3     30.0      4.1
         SSE   20.0   10.0                                     3     30.0      2.7
           S                                                   0      0.0
         SSW                                                   0      0.0
          SW   10.0                                            1     10.0      1.6
         WSW                                                   0      0.0
           W                                                   0      0.0
         WNW                                                   0      0.0
          NW                                                   0      0.0
         NNW                                                   0      0.0

  CALM                                                         0      0.0

COL. TOTALS    60.0   40.0                                    10               2.8
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      FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
100 METER LEVEL WINDS MORNING   SEPTEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ******************************
               00.1   03.0   06.0   10.0   16.0  GREATER     ROW  SUMMARY
                TO     TO     TO     TO     TO      THAN    TOTAL    TOTAL  AVERAGE
               02.9   05.9   09.9   15.9   25.0     25.0   COUNT  PERCENT    SPEED

           N   11.1   22.2    5.5                              7     38.8      3.5
         NNE           5.5   22.2    5.5                       6     33.2      7.6
          NE                                                   0      0.0
         ENE                                                   0      0.0
           E           5.5                                     1      5.5      5.0
         ESE                                                   0      0.0
          SE                                                   0      0.0
         SSE           5.5                                     1      5.5      5.3
           S                                                   0      0.0
         SSW                                                   0      0.0
          SW                  5.5                              1      5.5      7.4
         WSW                                                   0      0.0
           W                                                   0      0.0
         WNW                                                   0      0.0
          NW                                                   0      0.0
         NNW           5.5                                     1      5.5      3.7

  CALM                                                         1      5.0

COL. TOTALS    11.1   44.2   33.2    5.5                      18               5.1
100 METER LEVEL WINDS AFTERNOON SEPTEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ******************************
               00.1   03.0   06.0   10.0   16.0  GREATER     ROW  SUMMARY
                TO     TO     TO     TO     TO      THAN    TOTAL    TOTAL  AVERAGE
               02.9   05.9   09.9   15.9   25.0     25.0   COUNT  PERCENT    SPEED

           N          10.0                                     1     10.0      4.3
         NNE                                                   0      0.0
          NE                 10.0                              1     10.0      7.9
         ENE                                                   0      0.0
           E   10.0                                            1     10.0      2.6
         ESE                                                   0      0.0
          SE                        10.0                       1     10.0     11.4
         SSE   20.0   10.0                                     3     30.0      2.1
           S                                                   0      0.0
         SSW                                                   0      0.0
          SW   10.0          10.0                              2     20.0      4.3
         WSW                                                   0      0.0
           W                                                   0      0.0
         WNW   10.0                                            1     10.0       .3
          NW                                                   0      0.0
         NNW                                                   0      0.0

  CALM                                                         0      0.0

COL. TOTALS    50.0   20.0   20.0   10.0                      10               4.1
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING SEPTEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TC 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	5.5	16.6	5.5				5	27.6	4.8
NNE	5.5	16.6	5.5	5.5			6	33.1	6.3
NE		5.5	5.5				2	11.0	6.8
ENE	5.5						1	5.5	2.6
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		5.5					1	5.5	4.4
S		5.5					1	5.5	3.4
SSW						5.5	1	5.5	26.5
SW				5.5			1	5.5	13.0
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	16.5	49.7	16.5	11.0		5.5	18		6.9

200 METER LEVEL WINDS AFTERNOON SEPTEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TC 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	10.0						1	10.0	1.7
NNE							0	0.0	
NE		10.0					1	10.0	4.3
ENE							0	0.0	
E	10.0						1	10.0	1.5
ESE							0	0.0	
SE							0	0.0	
SSE		20.0	10.0				3	30.0	5.8
S	20.0						2	20.0	.5
SSW							0	0.0	
SW			10.0				1	10.0	7.9
WSW							0	0.0	
W	10.0						1	10.0	.6
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	50.0	30.0	20.0				10		3.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING SEPTEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	5.5	5.5	5.5				3	16.5	4.5
NNE	11.1		5.5	5.5	5.5		5	27.6	7.8
NE			11.1				2	11.1	6.9
ENE		11.1					2	11.1	3.6
E							0	0.0	
ESE							0	0.0	
SE	5.5						1	5.5	1.6
SSE			5.5				1	5.5	7.7
S		11.1					2	11.1	4.0
SSW							0	0.0	
SW					5.5		1	5.5	16.0
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW		5.5					1	5.5	5.1
CALM							0	0.0	
COL. TOTALS	22.1	33.2	27.6	5.5	11.0		18		6.2

300 METER LEVEL WINDS AFTERNOON SEPTEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	10.0						1	10.0	2.8
NNE							0	0.0	
NE		10.0					1	10.0	4.3
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		10.0					1	10.0	4.0
SSE	10.0	30.0					4	40.0	3.4
S							0	0.0	
SSW							0	0.0	
SW	20.0						2	20.0	1.0
WSW				10.0			1	10.0	10.4
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	40.0	50.0		10.0			10		3.7

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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
500 METER LEVEL WINDS MORNING   SEPTEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                TO    TO    TO    TC    TC     THAN    TOTAL    TOTAL AVERAGE
              02.9  05.9  09.9  15.9  25.0     25.0    COUNT  PERCENT   SPEED

          N    5.5                                         1      5.5     2.1
        NNE           5.5   5.5   5.5                      3     16.5     9.1
         NE           5.5   5.5                            2     11.0     4.9
        ENE                                                0      0.0
          E           5.5                                  1      5.5     5.6
        ESE    5.5                                         1      5.5     1.4
         SE                 5.5   5.5                      2     11.0     9.0
        SSE                                                0      0.0
          S          11.1                                  2     11.1     4.1
        SSW                                                0      0.0
         SW           5.5   5.5                            2     11.0     5.4
        WSW                                                0      0.0
          W                                                0      0.0
        WNW    5.5                                         1      5.5     1.3
         NW   11.1                                         2     11.1     2.3
        NNW           5.5                                  1      5.5     4.4

       CALM                                                0      0.0

COL. TOTALS   27.6  38.6  22.0  11.0                      18              5.2
500 METER LEVEL WINDS AFTERNOON SEPTEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                TO    TO    TO    TO    TO     THAN    TOTAL    TOTAL AVERAGE
              02.9  05.9  09.9  15.9  25.0     25.0    COUNT  PERCENT   SPEED

          N                                                0      0.0
        NNE          10.0                                  1     10.0     3.3
         NE          10.0                                  1     10.0     5.3
        ENE                                                0      0.0
          E                                                0      0.0
        ESE                                                0      0.0
         SE                                                0      0.0
        SSE   20.0  10.0        10.0                       4     40.0     4.8
          S                                                0      0.0
        SSW   10.0                                         1     10.0      .9
         SW   10.0                                         1     10.0     1.7
        WSW                                                0      0.0
          W                10.0                            1     10.0     6.4
        WNW                                                0      0.0
         NW          10.0                                  1     10.0     5.9
        NNW                                                0      0.0

       CALM                                                0      0.0

COL. TOTALS   40.0  40.0  10.0  10.0                      10              4.2
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
750 METER LEVEL WINDS MORNING   SEPTEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                TO    TO    TO    TC    TC     THAN    TOTAL    TOTAL AVERAGE
              02.9  05.9  09.9  15.9  25.0     25.0    COUNT  PERCENT   SPEED

          N                                                0      0.0
        NNE    5.5                                         1      5.5      .5
         NE                       5.5                      1      5.5    14.2
        ENE                                                0      0.0
          E                                                0      0.0
        ESE           5.5                                  1      5.5     4.0
         SE           5.5         5.5                      2     11.0     8.1
        SSE          11.1                                  2     11.1     4.3
          S   11.1    5.5                                  3     16.6     2.7
        SSW    5.5    5.5                                  2     11.0     2.8
         SW                 5.5                            1      5.5     6.2
        WSW           5.5                                  1      5.5     4.6
          W           5.5                                  1      5.5     4.3
        WNW    5.5                                         1      5.5     1.6
         NW    5.5    5.5                                  2     11.0     2.6
        NNW                                                0      0.0

       CALM                                                0      0.0

COL. TOTALS   33.1  49.6   5.5  11.0                      18              4.4
750 METER LEVEL WINDS AFTERNOON SEPTEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
                TO    TO    TO    TO    TC     THAN    TOTAL    TOTAL AVERAGE
              02.9  05.9  09.9  15.9  25.0     25.0    COUNT  PERCENT   SPEED

          N                                                0      0.0
        NNE                                                0      0.0
         NE   10.0                                         1     10.0     1.2
        ENE                                                0      0.0
          E                                                0      0.0
        ESE                                                0      0.0
         SE                                                0      0.0
        SSE                                                0      0.0
          S   10.0                                         1     10.0     1.4
        SSW   20.0                                         2     20.0     2.1
         SW   20.0                                         2     20.0     1.4
        WSW   10.0  10.0              10.0                 3     30.0     8.8
          W   10.0                                         1     10.0     1.0
        WNW                                                0      0.0
         NW                                                0      0.0
        NNW                                                0      0.0

       CALM                                                0      0.0

COL. TOTALS   80.0  10.0              10.0                10              3.7
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING SEPTEMBER,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND ************************								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	5.8		5.8				2	11.6	4.0
SE	5.8	5.8					2	11.6	3.4
SSE	17.6	5.8	5.8				5	29.2	3.3
S	5.8	5.8					2	11.6	2.1
SSW							0	0.0	
SW				5.8			1	5.8	11.2
WSW		5.8	11.7				3	17.5	5.7
W							0	0.0	
WNW		5.8	5.8				2	11.6	5.4
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	35.0	29.0	29.1	5.8			17		4.4

1000 METER LEVEL WINDS AFTERNOON SEPTEMBER,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND ************************								
N							0	0.0	
NNE							C	0.C	
NE	10.0						1	10.0	2.7
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	10.0						1	10.0	1.6
S							0	0.0	
SSW	10.0	10.0					2	20.0	3.2
SW		10.0	10.0				2	20.0	5.2
WSW	10.0				10.0		2	20.0	10.3
W		10.0					1	10.0	5.9
WNW	10.0						1	10.0	.5
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	50.0	30.0	10.0		10.0		10		4.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING SEPTEMBER,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND ************************								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E		6.6					1	6.6	3.3
ESE							0	0.0	
SE		6.6					1	6.6	4.3
SSE							0	0.0	
S	6.6	6.6					2	13.2	2.8
SSW		6.6	6.6				2	13.2	7.3
SW		6.6					1	6.6	5.1
WSW							0	0.0	
W		26.6	13.3	6.6			7	46.5	5.6
WNW				6.6			1	6.6	11.5
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	6.6	59.6	19.9	13.2			15		5.5

1500 METER LEVEL WINDS AFTERNOON SEPTEMBER,1979

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND ************************								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		11.1					1	11.1	4.0
SSE							0	0.0	
S	11.1						1	11.1	.8
SSW				11.1			1	11.1	10.6
SW		11.1	33.3				4	44.4	7.5
WSW		11.1					1	11.1	4.1
W		11.1					1	11.1	4.4
WNW							0	0.C	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	44.4	33.3	11.1			9		6.0

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           FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING   SEPTEMBER,1979
  DIRECTION ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

          N                                              0     0.0
        NNE                                              0     0.0
         NE                                              0     0.0
        ENE                                              0     0.0
          E                                              0     0.0
        ESE   6.6   6.6                                  2    13.2     2.9
         SE                                              0     0.0
        SSE                                              0     0.0
          S                                              0     0.0
        SSW              13.3                            2    13.3     6.4
         SW              13.3                            2    13.3     7.0
        WSW        13.3  13.3                            4    26.6     6.1
          W         6.6         6.6   6.6                3    19.8    11.1
        WNW         6.6         6.6                      2    13.2     9.2
         NW                                              0     0.0
        NNW                                              0     0.0

       CALM                                              0     0.0

COL. TOTALS   6.6  33.1  39.9  13.2   6.6               15             7.2
2000 METER LEVEL WINDS AFTERNOON SEPTEMBER,1979
  DIRECTION ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
              TO    TO    TO    TC    TC    THAN     TOTAL   TCTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

          N                                              0     0.0
        NNE                                              0     0.0
         NE                                              0     0.0
        ENE                                              0     0.0
          E                                              0     0.0
        ESE                                              0     0.0
         SE                                              0     0.0
        SSE              12.5                            1    12.5     7.6
          S                                              0     0.0
        SSW                    12.5                      1    12.5    14.7
         SW                    12.5                      1    12.5    10.4
        WSW              12.5                            1    12.5     7.8
          W        25.0                                  2    25.0     5.1
        WNW              12.5                            1    12.5     6.1
         NW              12.5                            1    12.5     6.6
        NNW                                              0     0.0

       CALM                                              0     0.0

COL. TOTALS        25.0  50.0  25.0                      8             7.9
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           FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2500 METER LEVEL WINDS MORNING   SEPTEMBER,1979
  DIRECTION ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
              TO    TO    TO    TO    TC    THAN     TOTAL   TCTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

          N                                              0     0.0
        NNE                                              0     0.0
         NE                                              0     0.0
        ENE                                              0     0.0
          E                                              0     0.0
        ESE                                              0     0.0
         SE                                              0     0.0
        SSE                                              0     0.0
          S                                              0     0.0
        SSW                                              0     0.0
         SW                                              0     0.0
        WSW                                              0     0.0
          W                                              0     0.0
        WNW                                              0     0.0
         NW                                              0     0.0
        NNW                                              0     0.0

       CALM                                              0     0.0

COL. TOTALS                                              0
2500 METER LEVEL WINDS AFTERNOON SEPTEMBER,1979
  DIRECTION ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
              TO    TO    TO    TO    TC    THAN     TOTAL   TCTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

          N                                              0     0.0
        NNE                                              0     0.0
         NE                                              0     0.0
        ENE                                              0     0.0
          E                                              0     0.0
        ESE                                              0     0.0
         SE                                              0     0.0
        SSE                                              0     0.0
          S                                              0     0.0
        SSW                                              0     0.0
         SW                                              0     0.0
        WSW                                              0     0.0
          W             100.0                            1   100.0     8.6
        WNW                                              0     0.0
         NW                                              0     0.0
        NNW                                              0     0.0

       CALM                                              0     0.0

COL. TOTALS             100.0                            1             8.6
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
        SURFACE WINDS MORNING     OCTOBER,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO     THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0     COUNT  PERCENT  SPEED

        N     36.8                                         7    36.8      .5
      NNE      5.2   5.2                                   2    10.4     2.7
       NE                                                  0     0.0
      ENE      5.2                                         1     5.2     1.6
        E                                                  0     0.0
      ESE                                                  0     0.0
       SE                                                  0     0.0
      SSE      5.2                                         1     5.2      .4
        S      5.2                                         1     5.2      .2
      SSW      5.2                                         1     5.2     2.7
       SW      5.2                                         1     5.2      .6
      WSW                                                  0     0.0
        W      5.2                                         1     5.2      .9
      WNW                                                  0     0.0
       NW      5.2                                         1     5.2     1.3
      NNW      5.2                                         1     5.2     1.5

     CALM                                                  2    10.0

COL. TOTALS   83.6   5.2                                  19              .9
        SURFACE WINDS AFTERNOON   OCTOBER,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TC     THAN     TOTAL   TCTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0     COUNT  PERCENT  SPEED

        N                                                  0     0.0
      NNE     10.0                                         1    10.0     1.8
       NE     10.0                                         1    10.0     1.8
      ENE                                                  0     0.0
        E                                                  0     0.0
      ESE                                                  0     0.0
       SE                                                  0     0.0
      SSE     10.0  10.0                                   2    20.0     3.3
        S     40.0                                         4    40.0     2.1
      SSW           10.0                                   1    10.0     3.6
       SW                                                  0     0.0
      WSW                                                  0     0.0
        W                                                  0     0.0
      WNW     10.0                                         1    10.0      .9
       NW                                                  0     0.0
      NNW                                                  0     0.0

     CALM                                                  0     0.0

COL. TOTALS   60.0  20.0                                  10             2.3
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
100 METER LEVEL WINDS MORNING     OCTOBER,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TC     THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0     COUNT  PERCENT  SPEED

        N            5.2   5.2                             2    10.4     4.7
      NNE     15.7  15.7         5.2                       7    36.6     4.3
       NE      5.2   5.2                                   2    10.4     2.6
      ENE     10.5                                         2    10.5     1.6
        E                                                  0     0.0
      ESE                                                  0     0.0
       SE                                                  0     0.0
      SSE                                                  0     0.0
        S     10.5                                         2    10.5     2.6
      SSW                  5.2                             1     5.2     8.1
       SW                                                  0     0.0
      WSW                                                  0     0.0
        W      5.2                                         1     5.2     1.3
      WNW                                                  0     0.0
       NW                                                  0     0.0
      NNW            5.2                                   1     5.2     5.1

     CALM                                                  1     5.0

COL. TOTALS   47.1  31.3  10.4   5.2                      19             3.5
100 METER LEVEL WINDS AFTERNOON   OCTOBER,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TC     THAN     TOTAL   TCTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0    25.0     COUNT  PERCENT  SPEED

        N                                                  0     0.0
      NNE                                                  0     0.0
       NE     10.0  10.0                                   2    20.0     3.0
      ENE                                                  0     0.0
        E                                                  0     0.0
      ESE                                                  0     0.0
       SE                                                  0     0.0
      SSE     10.0        10.0                             2    20.0     4.7
        S     10.0  10.0  20.0                             4    40.0     4.4
      SSW                                                  0     0.0
       SW     10.0  10.0                                   2    20.0     2.2
      WSW                                                  0     0.0
        W                                                  0     0.0
      WNW                                                  0     0.0
       NW                                                  0     0.0
      NNW                                                  0     0.0

     CALM                                                  0     0.0

COL. TOTALS   40.0  30.0  30.0                            10             3.7
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING OCTOBER, 1979

DIRECTION	********* WIND SPEEDS METERS/SECOND						ROW	SUMMARY	*****
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N	5.2	10.5					3	15.7	4.2
NNE	5.2	5.2					2	10.4	4.1
NE		10.5	10.5				4	21.0	5.5
ENE							0	0.0	
E							0	0.0	
ESE	5.2						1	5.2	1.8
SE							0	0.0	
SSE		5.2					1	5.2	4.6
S	5.2		5.2				2	10.4	5.1
SSW							0	0.0	
SW		5.2	5.2				2	10.4	6.3
WSW							0	0.0	
W							0	0.0	
WNW	5.2						1	5.2	1.0
NW							0	0.0	
NNW	5.2		5.2				2	10.4	5.2
CALM							1	5.0	
COL. TOTALS	31.2	36.6	26.1				19		4.4

200 METER LEVEL WINDS AFTERNOON OCTOBER, 1979

DIRECTION	********* WIND SPEEDS METERS/SECOND						ROW	SUMMARY	*****
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		20.0					2	20.0	3.4
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	10.0						1	10.0	.8
SSE		10.0	10.0				2	20.0	5.0
S	20.0				10.0		3	30.0	7.2
SSW		10.0					1	10.0	4.6
SW		10.0					1	10.0	4.7
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	30.0	50.0	10.0		10.0		10		4.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING OCTOBER, 1979

DIRECTION	********* WIND SPEEDS METERS/SECOND						ROW	SUMMARY	*****
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	5.2	21.0					5	26.2	4.6
NE			5.2				1	5.2	7.8
ENE		5.2					1	5.2	4.4
E							0	0.0	
ESE	10.5	5.2					3	15.7	2.7
SE							0	0.0	
SSE		5.2	5.2				2	10.4	5.3
S							0	0.0	
SSW	15.7		5.2				4	20.9	3.2
SW			5.2				1	5.2	6.6
WSW							0	0.0	
W							0	0.0	
WNW	10.5						2	10.5	2.4
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	41.9	36.6	20.8				19		4.1

300 METER LEVEL WINDS AFTERNOON OCTOBER, 1979

DIRECTION	********* WIND SPEEDS METERS/SECOND						ROW	SUMMARY	*****
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	10.0						1	10.0	2.1
ENE	10.0						1	10.0	1.0
E	10.0						1	10.0	1.7
ESE							0	0.0	
SE		10.0					1	10.0	4.1
SSE	20.0		10.0				3	30.0	4.1
S		10.0			10.0		2	20.0	11.4
SSW							0	0.0	
SW			10.0				1	10.0	6.6
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	50.0	20.0	20.0		10.0		10		5.0

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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 500 METER LEVEL WINDS MORNING      OCTOBER,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
               00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
                TO    TO    TO    TO    TC    THAN     TOTAL  TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

         N                                                 0    0.0
       NNE      5.2   5.2                                  2   10.4     3.7
        NE            5.2  10.5                            3   15.7     6.2
       ENE                                                 0    0.0
         E            5.2                                  1    5.2     3.4
       ESE                                                 0    0.0
        SE                  5.2                            1    5.2     6.7
       SSE            5.2  15.7                            4   20.9     6.8
         S      5.2   5.2                                  2   10.4     3.1
       SSW      5.2   5.2   5.2   5.2                      4   20.8     7.0
        SW                                                 0    0.0
       WSW                                                 0    0.0
         W                                                 0    0.0
       WNW            5.2                                  1    5.2     4.2
        NW                                                 0    0.0
       NNW            5.2                                  1    5.2     3.8

      CALM                                                 0    0.0

 COL. TOTALS   15.6  41.6  36.6   5.2                     19            5.5
 500 METER LEVEL WINDS AFTERNOON    OCTOBER,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
               00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
                TO    TO    TO    TO    TC    THAN     TOTAL  TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

         N                                                 0    0.0
       NNE     11.1                                        1   11.1     2.7
        NE                                                 0    0.0
       ENE                                                 0    0.0
         E                                                 0    0.0
       ESE                                                 0    0.0
        SE                                                 0    0.0
       SSE     11.1  22.2  11.1                            4   44.4     5.1
         S           11.1        11.1                      2   22.2     9.5
       SSW           22.2                                  2   22.2     3.2
        SW                                                 0    0.0
       WSW                                                 0    0.0
         W                                                 0    0.0
       WNW                                                 0    0.0
        NW                                                 0    0.0
       NNW                                                 0    0.0

      CALM                                                 0    0.0

 COL. TOTALS   22.2  55.5  11.1  11.1                      9            5.4
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
 750 METER LEVEL WINDS MORNING      OCTOBER,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
               00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
                TO    TO    TO    TO    TO    THAN     TOTAL  TOTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

         N                                                 0    0.0
       NNE                                                 0    0.0
        NE                                                 0    0.0
       ENE                  5.5                            1    5.5     8.3
         E                                                 0    0.0
       ESE                  5.5                            1    5.5     6.2
        SE                 11.1                            2   11.1     8.6
       SSE     11.1   5.5  16.6                            6   33.2     5.4
         S            5.5                                  1    5.5     4.9
       SSW           11.1                                  2   11.1     4.5
        SW                  5.5   5.5                      2   11.0    10.5
       WSW      5.5         5.5                            2   11.0     5.4
         W                                                 0    0.0
       WNW            5.5                                  1    5.5     5.4
        NW                                                 0    0.0
       NNW                                                 0    0.0

      CALM                                                 0    0.0

 COL. TOTALS   16.6  27.6  49.7   5.5                     18            6.4
 750 METER LEVEL WINDS AFTERNCON    OCTOBER,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ****************************
               00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
                TO    TO    TO    TC    TC    THAN     TOTAL  TCTAL  AVERAGE
               02.9  05.9  09.9  15.9  25.0   25.0     COUNT PERCENT  SPEED

         N     11.1                                        1   11.1     2.4
       NNE                                                 0    0.0
        NE                                                 0    0.0
       ENE                                                 0    0.0
         E                                                 0    0.0
       ESE                                                 0    0.0
        SE                 11.1                            1   11.1     8.1
       SSE           22.2                                  2   22.2     4.3
         S                       22.2                      2   22.2    10.3
       SSW           11.1                                  1   11.1     3.6
        SW           11.1                                  1   11.1     5.3
       WSW     11.1                                        1   11.1     1.6
         W                                                 0    0.0
       WNW                                                 0    0.0
        NW                                                 0    0.0
       NNW                                                 0    0.0

      CALM                                                 0    0.0

 COL. TOTALS   22.2  44.4  11.1  22.2                      9            5.5
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING OCTOBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE				5.5			1	5.5	10.4
E	5.5						1	5.5	2.8
ESE							0	0.0	
SE			5.5				1	5.5	6.5
SSE		5.5	5.5				2	11.0	5.0
S		5.5	5.5				2	11.0	6.0
SSW	5.5	5.5					2	11.0	3.6
SW	5.5	5.5	5.5	5.5			4	22.0	6.9
WSW		5.5	5.5				2	11.0	6.3
W		5.5					1	5.5	4.0
WNW		5.5					1	5.5	4.9
NW				5.5			1	5.5	11.2
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	16.5	38.5	27.5	16.5			18		6.0

1000 METER LEVEL WINDS AFTERNOON OCTOBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	11.1						1	11.1	1.6
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			11.1				1	11.1	8.3
S			11.1				1	11.1	9.0
SSW		11.1		11.1			2	22.2	7.3
SW	11.1						1	11.1	1.9
WSW			11.1				1	11.1	6.3
W			11.1				1	11.1	8.9
WNW							0	0.0	
NW							0	0.0	
NNW	11.1						1	11.1	.8
CALM							0	0.0	
COL. TOTALS	33.3	11.1	44.4	11.1			9		5.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING OCTOBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E	6.6						1	6.6	1.2
ESE							0	0.0	
SE		6.6					1	6.6	5.9
SSE		6.6					1	6.6	4.0
S			6.6				1	6.6	9.2
SSW							0	0.0	
SW				13.3			2	13.3	10.6
WSW	13.3			6.6			3	19.9	5.5
W			13.3				2	13.3	7.6
WNW			6.6	13.3			3	19.9	10.4
NW			6.6				1	6.6	7.2
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	19.9	13.2	33.1	33.2			15		7.4

1500 METER LEVEL WINDS AFTERNOON OCTOBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S				12.5			1	12.5	10.1
SSW							0	0.0	
SW				12.5			1	12.5	13.2
WSW							0	0.0	
W	12.5		25.0	12.5			4	50.0	6.1
WNW	12.5		12.5				2	25.0	5.3
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	25.0		37.5	37.5			8		7.3

```
                 FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING      OCTOBER,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N                                                0      0.0
      NNE                                                0      0.0
       NE                                                0      0.0
      ENE                                                0      0.0
        E           7.1                                  1      7.1      4.8
      ESE                                                0      0.0
       SE     7.1                                        1      7.1      2.4
      SSE     7.1                                        1      7.1       .6
        S                                                0      0.0
      SSW                       7.1                      1      7.1     11.5
       SW                      14.2                      2     14.2     10.6
      WSW     7.1                                        1      7.1      2.9
        W                       7.1                      1      7.1     15.0
      WNW           7.1         7.1   7.1                3     21.3     12.0
       NW                14.2   7.1                      3     21.3      9.2
      NNW                                                0      0.0

     CALM                                                0      0.0

COL. TOTALS  21.3  14.2  14.2  42.6   7.1               14               8.7
2000 METER LEVEL WINDS AFTERNCON    OCTOBER,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL   TCTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N                                                0      0.0
      NNE                                                0      0.0
       NE                                                0      0.0
      ENE                                                0      0.0
        E                                                0      0.0
      ESE                                                0      0.0
       SE                                                0      0.0
      SSE                                                0      0.0
        S                      12.5                      1     12.5     13.3
      SSW                      12.5                      1     12.5     14.9
       SW                                                0      0.0
      WSW                                                0      0.0
        W          12.5  25.0                            3     37.5      6.6
      WNW                                                0      0.0
       NW    12.5        12.5         12.5               3     37.5      9.5
      NNW                                                0      0.0

     CALM                                                0      0.0

COL. TCTALS  12.5  12.5  37.5  25.0  12.5                8               9.5
```

```
                 FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2500 METER LEVEL WINDS MORNING      OCTOBER,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
               TO    TO    TO    TC    TC    THAN      TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N                                                0      0.0
      NNE                                                0      0.0
       NE                                                0      0.0
      ENE                                                0      0.0
        E                                                0      0.0
      ESE                                                0      0.0
       SE                                                0      0.0
      SSE                                                0      0.0
        S                                                0      0.0
      SSW                                                0      0.0
       SW                                                0      0.0
      WSW                                                0      0.0
        W                                                0      0.0
      WNW                                                0      0.0
       NW                                                0      0.0
      NNW                                                0      0.0

     CALM                                                0      0.0

COL. TOTALS                                              0
2500 METER LEVEL WINDS AFTERNOON    OCTOBER,1979
 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      RCW   SUMMARY
               TO    TO    TC    TC    TC    THAN      TOTAL   TCTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N                                                0      0.0
      NNE                                                0      0.0
       NE                                                0      0.0
      ENE                                                0      0.0
        E                                                0      0.0
      ESE                                                0      0.0
       SE                                                0      0.0
      SSE                                                0      0.0
        S                                                0      0.0
      SSW                                                0      0.0
       SW                                                0      0.0
      WSW                                                0      0.0
        W                                                0      0.0
      WNW                                                0      0.0
       NW                                                0      0.0
      NNW                                                0      0.0

     CALM                                                0      0.0

COL. TOTALS                                              0
```

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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

      SURFACE WINDS MORNING    NOVEMBER.1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N       5.5                                      1      5.5     1.1
    NNE      16.6                                      3     16.6      .5
     NE                                                0      0.0
    ENE                                                0      0.0
      E                                                0      0.0
    ESE                                                0      0.0
     SE       5.5                                      1      5.5      .6
    SSE                                                0      0.0
      S       5.5                                      1      5.5      .5
    SSW                                                0      0.0
     SW      11.1                                      2     11.1      .6
    WSW                                                0      0.0
      W       5.5                                      1      5.5     1.0
    WNW      11.1                                      2     11.1      .8
     NW      27.7                                      5     27.7      .7
    NNW       5.5                                      1      5.5     1.3

   CALM                                                1      5.0

COL. TOTALS  94.0                                     18               .7

      SURFACE WINDS AFTERNOON  NOVEMBER.1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N                                                0      0.0
    NNE      11.1                                      1     11.1     1.8
     NE                                                0      0.0
    ENE                                                0      0.0
      E      11.1                                      1     11.1      .7
    ESE                                                0      0.0
     SE                                                0      0.0
    SSE                                                0      0.0
      S      11.1                                      1     11.1     1.6
    SSW      11.1                                      1     11.1      .7
     SW      11.1                                      1     11.1     1.6
    WSW      11.1                                      1     11.1      .9
      W                                                0      0.0
    WNW      11.1                                      1     11.1      .8
     NW      22.2                                      2     22.2      .5
    NNW                                                0      0.0

   CALM                                                0      0.0

COL. TOTALS  99.9                                      9              1.0
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING    NOVEMBER.1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N      11.1                                      2     11.1     2.2
    NNE             5.5                                1      5.5     3.2
     NE      11.1         5.5                          3     16.6     2.7
    ENE                                                0      0.0
      E                                                0      0.0
    ESE                                                0      0.0
     SE                                                0      0.0
    SSE                                                0      0.0
      S                                                0      0.0
    SSW                                                0      0.0
     SW      11.1                                      2     11.1     1.1
    WSW       5.5                                      1      5.5     1.2
      W                                                0      0.0
    WNW                                                0      0.0
     NW             5.5                                1      5.5     3.0
    NNW      11.1  33.3                                8     44.4     3.4

   CALM                                                0      0.0

COL. TOTALS  49.9  44.3   5.5                         18              2.7

100 METER LEVEL WINDS AFTERNOON  NOVEMBER.1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N      11.1                                      1     11.1     1.4
    NNE                                                0      0.0
     NE            11.1                                1     11.1     4.9
    ENE      11.1                                      1     11.1      .7
      E      11.1                                      1     11.1      .9
    ESE                                                0      0.0
     SE                                                0      0.0
    SSE                                                0      0.0
      S      11.1                                      1     11.1     2.6
    SSW                                                0      0.0
     SW                                                0      0.0
    WSW      11.1  11.1                                2     22.2     2.5
      W                                                0      0.0
    WNW                                                0      0.0
     NW      11.1                                      1     11.1      .9
    NNW      11.1                                      1     11.1      .4

   CALM                                                0      0.0

COL. TOTALS  77.7  22.2                                9              1.8
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING     NOVEMBER.1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT PERCENT  SPEED

       N            11.1                                   2    11.1    4.6
     NNE            16.6                                   3    16.6    4.1
      NE             5.5                                   1     5.5    4.8
     ENE       5.5                                         1     5.5     .5
       E                                                   0     0.0
     ESE                                                   0     0.0
      SE                                                   0     0.0
     SSE                   5.5                             1     5.5    9.5
       S                                                   0     0.0
     SSW                                                   0     0.0
      SW                                                   0     0.0
     WSW            11.1                                   2    11.1    3.9
       W                                                   0     0.0
     WNW                                                   0     0.0
      NW             5.5                                   1     5.5    4.5
     NNW       5.5  22.2  11.1                             7    38.8    4.4

    CALM                                                   0     0.0

COL. TOTALS   11.0  72.0  16.6                            18            4.4

200 METER LEVEL WINDS AFTERNOON  NOVEMBER.1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  15.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT PERCENT  SPEED

       N                                                   0     0.0
     NNE      11.1  11.1                                   2    22.2    3.6
      NE      11.1                                         1    11.1    1.4
     ENE                                                   0     0.0
       E                                                   0     0.0
     ESE                                                   0     0.0
      SE                                                   0     0.0
     SSE      11.1                                         1    11.1    1.6
       S      11.1  11.1                                   2    22.2    1.9
     SSW                                                   0     0.0
      SW                  11.1                             1    11.1    6.8
     WSW      11.1                                         1    11.1    1.1
       W                                                   0     0.0
     WNW                                                   0     0.0
      NW      11.1                                         1    11.1     .7
     NNW                                                   0     0.0

    CALM                                                   0     0.0

COL. TOTALS   66.6  22.2  11.1                             9            2.5
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING     NOVEMBER.1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT PERCENT  SPEED

       N            11.1                                   2    11.1    4.2
     NNE       5.5   5.5   5.5                             3    16.5    4.2
      NE             5.5                                   1     5.5    4.6
     ENE       5.5                                         1     5.5    1.3
       E       5.5                                         1     5.5    1.0
     ESE                                                   0     0.0
      SE             5.5                                   1     5.5    4.1
     SSE                                                   0     0.0
       S       5.5                                         1     5.5    1.6
     SSW                                                   0     0.0
      SW                                                   0     0.0
     WSW             5.5                                   1     5.5    3.0
       W             5.5                                   1     5.5    3.2
     WNW                                                   0     0.0
      NW                                                   0     0.0
     NNW            22.2  11.1                             6    33.3    5.0

    CALM                                                   0     0.0

COL. TOTALS   22.0  60.8  16.6                            18            3.8

300 METER LEVEL WINDS AFTERNOON  NOVEMBER.1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL  TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT PERCENT  SPEED

       N      22.2                                         2    22.2    1.1
     NNE      11.1                                         1    11.1    1.4
      NE      11.1  11.1                                   2    22.2    2.9
     ENE                                                   0     0.0
       E                                                   0     0.0
     ESE      11.1                                         1    11.1    1.1
      SE      22.2                                         2    22.2    1.5
     SSE                                                   0     0.0
       S                                                   0     0.0
     SSW                                                   0     0.0
      SW                  11.1                             1    11.1    6.7
     WSW                                                   0     0.0
       W                                                   0     0.0
     WNW                                                   0     0.0
      NW                                                   0     0.0
     NNW                                                   0     0.0

    CALM                                                   0     0.0

COL. TOTALS   77.7  11.1  11.1                             9            2.2
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING     NOVEMBER,1979

DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL  TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT PERCENT  SPEED

        N    5.5                                       1   5.5     2.5
      NNE   11.1   5.5   5.5                           4  22.1     4.2
       NE    5.5                                       1   5.5      .6
      ENE    5.5                                       1   5.5     2.0
        E                                              0   0.0
      ESE    5.5                                       1   5.5      .3
       SE   11.1         5.5                           3  16.6     3.3
      SSE                                              0   0.0
        S                                              0   0.0
      SSW    5.5                                       1   5.5     1.0
       SW                                              0   0.0
      WSW                                              0   0.0
        W    5.5                                       1   5.5     1.1
      WNW    5.5  11.1                                 3  16.6     3.7
       NW                5.5                           1   5.5     8.3
      NNW          5.5                                 1   5.5     3.3

     CALM                                              0   0.0

COL. TOTALS 60.7  22.1  16.5                          18           3.1

500 METER LEVEL WINDS AFTERNOON  NOVEMBER,1979

DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL  TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT PERCENT  SPEED

        N                                              0   0.0
      NNE   22.2                                       2  22.2     1.3
       NE                                              0   0.0
      ENE   11.1                                       1  11.1      .9
        E                                              0   0.0
      ESE                                              0   0.0
       SE                                              0   0.0
      SSE         11.1                                 1  11.1     3.0
        S                                              0   0.0
      SSW                                              0   0.0
       SW   11.1  11.1  11.1                           3  33.3     4.0
      WSW                                              0   0.0
        W   11.1                                       1  11.1      .7
      WNW                                              0   0.0
       NW                                              0   0.0
      NNW   11.1                                       1  11.1     2.8

     CALM                                              0   0.0

COL. TOTALS 66.6  22.2  11.1                           9           2.4
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING     NOVEMBER,1979

DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL  TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT PERCENT  SPEED

        N    5.8                                       1   5.8      .3
      NNE          5.8                                 1   5.8     4.1
       NE    5.8                                       1   5.8     1.3
      ENE                                              0   0.0
        E                                              0   0.0
      ESE   11.7                                       2  11.7      .7
       SE    5.8                                       1   5.8      .2
      SSE          5.8   5.8                           2  11.6     6.3
        S    5.8                                       1   5.8     1.5
      SSW                                              0   0.0
       SW    5.8                                       1   5.8     2.5
      WSW    5.8   5.8                                 2  11.6     1.9
        W    5.8                                       1   5.8      .9
      WNW    5.8   5.8                                 2  11.6     3.3
       NW    5.8                                       1   5.8     2.0
      NNW          5.8                                 1   5.8     4.6

     CALM                                              0   0.0

COL. TOTALS 63.9  29.0   5.8                          17           2.4

750 METER LEVEL WINDS AFTERNOON  NOVEMBER,1979

DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL  TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT PERCENT  SPEED

        N                                              0   0.0
      NNE                                              0   0.0
       NE                                              0   0.0
      ENE   22.2                                       2  22.2     1.0
        E                                              0   0.0
      ESE                                              0   0.0
       SE                                              0   0.0
      SSE                                              0   0.0
        S         11.1                                 1  11.1     4.3
      SSW   11.1  11.1                                 2  22.2     3.1
       SW         11.1                                 1  11.1     3.5
      WSW   11.1  11.1        11.1                     3  33.3     6.0
        W                                              0   0.0
      WNW                                              0   0.0
       NW                                              0   0.0
      NNW                                              0   0.0

     CALM                                              0   0.0

COL. TOTALS 44.4  44.4        11.1                     9           3.7
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1000 METER LEVEL WINDS MORNING    NOVEMBER,1979
DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1   03.0   06.0   10.0   16.0 GREATER      ROW  SUMMARY
             TO     TO     TO     TO     TO    THAN     TOTAL    TOTAL  AVERAGE
            02.9   05.9   09.9   15.9   25.0    25.0    COUNT  PERCENT    SPEED

        N                                                   0      0.0
      NNE           7.6                                     1      7.6      3.6
       NE                                                   0      0.0
      ENE                                                   0      0.0
        E                                                   0      0.0
      ESE                                                   0      0.0
       SE           7.6                                     1      7.6      3.3
      SSE   23.0    7.6                                     4     30.6      2.0
        S    7.6    7.6                                     2     15.2      3.1
      SSW                                                   0      0.0
       SW                                                   0      0.0
      WSW           7.6                                     1      7.6      5.6
        W                                                   0      0.0
      WNW          15.3                                     2     15.3      4.3
       NW          15.3                                     2     15.3      3.7
      NNW                                                   0      0.0

     CALM                                                   0      0.0

COL. TOTALS 30.6   68.6                                    13               3.3
1000 METER LEVEL WINDS AFTERNOON  NOVEMBER,1979
DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1   03.0   06.0   10.0   16.0 GREATER      ROW  SUMMARY
             TO     TO     TO     TO     TO    THAN     TOTAL    TOTAL  AVERAGE
            02.9   05.9   09.9   15.9   25.0    25.0    COUNT  PERCENT    SPEED

        N                                                   0      0.0
      NNE                                                   0      0.0
       NE                                                   0      0.0
      ENE                                                   0      0.0
        E                                                   0      0.0
      ESE                                                   0      0.0
       SE   12.5   12.5                                     2     25.0      3.0
      SSE                                                   0      0.0
        S          12.5                                     1     12.5      4.2
      SSW                                                   0      0.0
       SW          12.5                                     1     12.5      5.2
      WSW   12.5                                            1     12.5      1.8
        W          12.5                                     1     12.5      4.8
      WNW          12.5   12.5                              2     25.0      5.7
       NW                                                   0      0.0
      NNW                                                   0      0.0

     CALM                                                   0      0.0

COL. TOTALS 25.0   62.5   12.5                              8               4.2
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1500 METER LEVEL WINDS MORNING    NOVEMBER,1979
DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1   03.0   06.0   10.0   16.0 GREATER      ROW  SUMMARY
             TO     TO     TO     TO     TO    THAN     TOTAL    TOTAL  AVERAGE
            02.9   05.9   09.9   15.9   25.0    25.0    COUNT  PERCENT    SPEED

        N                                                   0      0.0
      NNE                                                   0      0.0
       NE          10.0                                     1     10.0      3.6
      ENE                                                   0      0.0
        E                                                   0      0.0
      ESE                                                   0      0.0
       SE   10.0                                            1     10.0      2.9
      SSE                                                   0      0.0
        S          10.0                                     1     10.0      4.1
      SSW   20.0   10.0                                     3     30.0      2.1
       SW          10.0                                     1     10.0      5.7
      WSW                                                   0      0.0
        W                 10.0                              1     10.0      6.1
      WNW                                                   0      0.0
       NW          10.0                                     1     10.0      4.6
      NNW          10.0                                     1     10.0      5.7

     CALM                                                   0      0.0

COL. TOTALS 30.0   60.0   10.0                             10               3.9
1500 METER LEVEL WINDS AFTERNOON  NOVEMBER,1979
DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1   03.0   06.0   10.0   16.0 GREATER      ROW  SUMMARY
             TO     TO     TO     TO     TO    THAN     TOTAL    TOTAL  AVERAGE
            02.9   05.9   09.9   15.9   25.0    25.0    COUNT  PERCENT    SPEED

        N                                                   0      0.0
      NNE                                                   0      0.0
       NE                                                   0      0.0
      ENE                                                   0      0.0
        E                 12.5                              1     12.5      7.8
      ESE                                                   0      0.0
       SE   12.5                                            1     12.5      2.3
      SSE                                                   0      0.0
        S                                                   0      0.0
      SSW          12.5                                     1     12.5      5.4
       SW   12.5                                            1     12.5      2.8
      WSW                 12.5                              1     12.5      6.2
        W                 12.5                              1     12.5      7.1
      WNW          12.5          12.5                       2     25.0      9.3
       NW                                                   0      0.0
      NNW                                                   0      0.0

     CALM                                                   0      0.0

COL. TOTALS 25.0   25.0   37.5   12.5                       8               6.2
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                FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING    NOVEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

        N                                              0      0.0
      NNE                                              0      0.0
       NE                                              0      0.0
      ENE                                              0      0.0
        E     12.5                                     1     12.5     2.1
      ESE                                              0      0.0
       SE                                              0      0.0
      SSE     12.5                                     1     12.5     2.5
        S                                              0      0.0
      SSW                                              0      0.0
       SW     12.5                                     1     12.5     1.3
      WSW                                              0      0.0
        W                       12.5                   1     12.5    11.6
      WNW                                              0      0.0
       NW                 12.5                         1     12.5     8.8
      NNW           12.5  25.0                         3     37.5     7.0

     CALM                                              0      0.0

 COL. TOTALS  37.5  12.5  37.5  12.5                   8              5.9
2000 METER LEVEL WINDS AFTERNOON  NOVEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

        N                                              0      0.0
      NNE                                              0      0.0
       NE     25.0                                     1     25.0     2.0
      ENE                                              0      0.0
        E                                              0      0.0
      ESE                                              0      0.0
       SE                                              0      0.0
      SSE                                              0      0.0
        S                                              0      0.0
      SSW                                              0      0.0
       SW     25.0                                     1     25.0     2.4
      WSW                                              0      0.0
        W                                              0      0.0
      WNW                               25.0           1     25.0    28.7
       NW                 25.0                         1     25.0     7.5
      NNW                                              0      0.0

     CALM                                              0      0.0

 COL. TOTALS  50.0        25.0          25.0           4             10.1
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                FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2500 METER LEVEL WINDS MORNING    NOVEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

        N                                              0      0.0
      NNE                                              0      0.0
       NE                                              0      0.0
      ENE                                              0      0.0
        E                                              0      0.0
      ESE                                              0      0.0
       SE                                              0      0.0
      SSE                                              0      0.0
        S                                              0      0.0
      SSW                                              0      0.0
       SW                                              0      0.0
      WSW                                              0      0.0
        W                                              0      0.0
      WNW                                              0      0.0
       NW                                              0      0.0
      NNW                                              0      0.0

     CALM                                              0      0.0

 COL. TOTALS                                           0
2500 METER LEVEL WINDS AFTERNOON  NOVEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

        N                                              0      0.0
      NNE                                              0      0.0
       NE                                              0      0.0
      ENE                                              0      0.0
        E                                              0      0.0
      ESE                                              0      0.0
       SE                                              0      0.0
      SSE                                              0      0.0
        S                                              0      0.0
      SSW                                              0      0.0
       SW                                              0      0.0
      WSW                                              0      0.0
        W                                              0      0.0
      WNW                                              0      0.0
       NW                                              0      0.0
      NNW                                              0      0.0

     CALM                                              0      0.0

 COL. TOTALS                                           0
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

        SURFACE WINDS MORNING     DECEMBER,1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

        N                                                  0      0.0
      NNE      9.0                                         1      9.0      .4
       NE                                                  0      0.0
      ENE                                                  0      0.0
        E                                                  0      0.0
      ESE                                                  0      0.0
       SE                                                  0      0.0
      SSE      9.0   9.0                                   2     18.0     2.0
        S     18.1                                         2     18.1     1.6
      SSW      9.0   9.0                                   2     18.0     1.8
       SW                                                  0      0.0
      WSW      9.0                                         1      9.0      .9
        W      9.0                                         1      9.0      .9
      WNW                                                  0      0.0
       NW                                                  0      0.0
      NNW                                                  0      0.0

     CALM                                                  2     18.0

COL. TOTALS   63.1  18.0                                  11               1.1

        SURFACE WINDS AFTERNOON   DECEMBER,1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

        N     12.5  12.5                                   2     25.0     2.1
      NNE                                                  0      0.0
       NE                                                  0      0.0
      ENE                                                  0      0.0
        E                                                  0      0.0
      ESE                                                  0      0.0
       SE                                                  0      0.0
      SSE     12.5                                         1     12.5     1.3
        S     25.0                                         2     25.0     2.3
      SSW                                                  0      0.0
       SW                                                  0      0.0
      WSW                                                  0      0.0
        W     12.5                                         1     12.5     2.7
      WNW     12.5                                         1     12.5      .6
       NW                                                  0      0.0
      NNW                                                  0      0.0

     CALM                                                  1     12.0

COL. TOTALS   75.0  12.5                                   8               1.6
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING    DECEMBER,1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

        N                                                  0      0.0
      NNE                                                  0      0.0
       NE                                                  0      0.0
      ENE                                                  0      0.0
        E      9.0                                         1      9.0     1.8
      ESE                                                  0      0.0
       SE            9.0                                   1      9.0     4.4
      SSE      9.0               9.0                       2     18.0     7.0
        S           18.1                                   2     18.1     4.7
      SSW     18.1         9.0                             3     27.1     4.6
       SW      9.0                                         1      9.0     1.7
      WSW                                                  0      0.0
        W                                                  0      0.0
      WNW                                                  0      0.0
       NW                                                  0      0.0
      NNW      9.0                                         1      9.0     1.2

     CALM                                                  0      0.0

COL. TOTALS   54.1  27.1   9.0   9.0                      11               4.2

100 METER LEVEL WINDS AFTERNOON  DECEMBER,1979

 DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN       TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0       COUNT  PERCENT  SPEED

        N                                                  0      0.0
      NNE                       12.5                       1     12.5    10.1
       NE                                                  0      0.0
      ENE                                                  0      0.0
        E                                                  0      0.0
      ESE                                                  0      0.0
       SE                                                  0      0.0
      SSE     12.5                                         1     12.5     2.7
        S           12.5                                   1     12.5     5.8
      SSW                 12.5                             1     12.5     9.6
       SW                                                  0      0.0
      WSW     12.5        12.5                             2     25.0     3.9
        W                                                  0      0.0
      WNW     25.0                                         2     25.0     1.4
       NW                                                  0      0.0
      NNW                                                  0      0.0

     CALM                                                  0      0.0

COL. TOTALS   50.0  12.5  25.0  12.5                       8               4.8
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING DECEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND	*********	*********	*********	*********	*********	********* ROW	SUMMARY	*********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	9.0						1	9.0	2.4
SSE			9.0				1	9.0	6.2
S	9.0	18.1		9.0			4	36.1	6.0
SSW	18.1						2	18.1	2.3
SW		9.0			9.0		2	18.0	10.6
WSW							0	0.0	
W		9.0					1	9.0	4.4
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	36.1	36.1	9.0	9.0	9.0		11		5.7

200 METER LEVEL WINDS AFTERNOON DECEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND	*********	*********	*********	*********	*********	********* ROW	SUMMARY	*********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE				12.5			1	12.5	13.1
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S	12.5	12.5	12.5				3	37.5	4.8
SSW				12.5			1	12.5	12.0
SW	12.5						1	12.5	.3
WSW							0	0.0	
W				12.5			1	12.5	11.1
WNW							0	0.0	
NW	12.5						1	12.5	.7
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	37.5	12.5	12.5	37.5			8		6.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING DECEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND	*********	*********	*********	*********	*********	********* ROW	SUMMARY	*********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	9.0	9.0	9.0				3	27.0	5.1
S	9.0		18.1				3	27.1	5.8
SSW							0	0.0	
SW	9.0	9.0			9.0		3	27.0	9.5
WSW		9.0					1	9.0	4.4
W		9.0					1	9.0	4.1
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	36.0	27.1		9.0		11		6.3

300 METER LEVEL WINDS AFTERNOON DECEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND	*********	*********	*********	*********	*********	********* ROW	SUMMARY	*********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE				12.5			1	12.5	10.4
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		12.5	12.5				2	25.0	5.6
S							0	0.0	
SSW		12.5	12.5				2	25.0	5.1
SW				12.5			1	12.5	11.2
WSW							0	0.0	
W					12.5		1	12.5	17.5
WNW	12.5						1	12.5	.9
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	12.5	25.0	25.0	25.0	12.5		8		7.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY NET

500 METER LEVEL WINDS MORNING   DECEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	9.0		9.0				2	18.0	5.4
SSE	9.0		9.0				2	18.0	5.7
S				9.0			1	9.0	12.1
SSW			9.0				1	9.0	6.3
SW		9.0					1	9.0	3.6
WSW		18.1	9.0				3	27.1	4.7
W		9.0					1	9.0	4.3
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	18.0	36.1	36.0	9.0			11		5.7

500 METER LEVEL WINDS AFTERNOON   DECEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE						12.5	1	12.5	36.4
NE							0	0.0	
ENE							0	0.0	
E				12.5			1	12.5	12.2
ESE							0	0.0	
SE							0	0.0	
SSE			25.0				2	25.0	7.6
S							0	0.0	
SSW				12.5			1	12.5	10.7
SW		12.5	12.5				2	25.0	5.0
WSW	12.5						1	12.5	1.7
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	12.5	12.5	37.5	25.0		12.5	8		10.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY NET

750 METER LEVEL WINDS MORNING   DECEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E	9.0						1	9.0	2.2
ESE							0	0.0	
SE							0	0.0	
SSE	9.0						1	9.0	2.9
S		9.0	9.0	9.0			3	27.0	7.6
SSW							0	0.0	
SW							0	0.0	
WSW	9.0	27.2	9.0				5	45.2	4.5
W			9.0				1	9.0	8.8
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	36.2	27.0	9.0			11		5.4

750 METER LEVEL WINDS AFTERNOON   DECEMBER,1979

DIRECTION	********* WIND SPEEDS METERS/SECOND *********								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N					12.5		1	12.5	17.0
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW	12.5	25.0					3	37.5	3.9
SW			12.5				1	12.5	6.0
WSW		12.5					1	12.5	5.6
W		12.5					1	12.5	3.6
WNW					12.5		1	12.5	18.7
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	12.5	50.0	12.5		25.0		8		7.8

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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1000 METER LEVEL WINDS MORNING    DECEMBER,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

       N                                                 0      0.0
     NNE                                                 0      0.0
      NE                                                 0      0.0
     ENE                                                 0      0.0
       E                                                 0      0.0
     ESE                                                 0      0.0
      SE      12.5                                       1     12.5      2.1
     SSE                                                 0      0.0
       S                  12.5                           1     12.5      9.2
     SSW                  12.5  12.5                     2     25.0      9.3
      SW                                                 0      0.0
     WSW                                                 0      0.0
       W            12.5  25.0        12.5               4     50.0      8.8
     WNW                                                 0      0.0
      NW                                                 0      0.0
     NNW                                                 0      0.0

    CALM                                                 0      0.0

COL. TOTALS   12.5  12.5  50.0  12.5  12.5               8               8.1
1000 METER LEVEL WINDS AFTERNOON  DECEMBER,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

       N                                                 0      0.0
     NNE                                                 0      0.0
      NE                                                 0      0.0
     ENE                                                 0      0.0
       E                                                 0      0.0
     ESE                                                 0      0.0
      SE                                                 0      0.0
     SSE                                                 0      0.0
       S                                                 0      0.0
     SSW      12.5                                       1     12.5      2.6
      SW            12.5  25.0                           3     37.5      7.1
     WSW            12.5                                 1     12.5      3.5
       W            12.5  12.5                           2     25.0      6.0
     WNW                        12.5                     1     12.5     11.4
      NW                                                 0      0.0
     NNW                                                 0      0.0

    CALM                                                 0      0.0

COL. TOTALS   12.5  37.5  37.5  12.5                     8               6.3
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               FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1500 METER LEVEL WINDS MORNING    DECEMBER,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

       N                                                 0      0.0
     NNE                                                 0      0.0
      NE                                                 0      0.0
     ENE                                                 0      0.0
       E                                                 0      0.0
     ESE                                                 0      0.0
      SE                                                 0      0.0
     SSE                                                 0      0.0
       S                                                 0      0.0
     SSW                              20.0               1     20.0     21.1
      SW                                                 0      0.0
     WSW                                                 0      0.0
       W            20.0  40.0  20.0                     4     80.0      6.9
     WNW                                                 0      0.0
      NW                                                 0      0.0
     NNW                                                 0      0.0

    CALM                                                 0      0.0

COL. TOTALS         20.0  40.0  20.0  20.0               5              11.3
1500 METER LEVEL WINDS AFTERNOON  DECEMBER,1979
  DIRECTION   ********* WIND SPEEDS METERS/SECOND ***************************
              00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
               TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

       N                                                 0      0.0
     NNE                                                 0      0.0
      NE                                                 0      0.0
     ENE                                                 0      0.0
       E            20.0                                 1     20.0      4.4
     ESE                                                 0      0.0
      SE                                                 0      0.0
     SSE                                                 0      0.0
       S                                                 0      0.0
     SSW                                                 0      0.0
      SW                  40.0                           2     40.0      7.3
     WSW                  20.0                           1     20.0      6.0
       W                  20.0                           1     20.0      6.7
     WNW                                                 0      0.0
      NW                                                 0      0.0
     NNW                                                 0      0.0

    CALM                                                 0      0.0

COL. TOTALS         20.0  80.0                           5               6.3
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING     DECEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N     50.0                                       1     50.0     2.7
      NNE                                                0      0.0
       NE                                                0      0.0
      ENE                                                0      0.0
        E                                                0      0.0
      ESE                                                0      0.0
       SE                                                0      0.0
      SSE                                                0      0.0
        S                                                0      0.0
      SSW                                                0      0.0
       SW                                                0      0.0
      WSW                   50.0                         1     50.0     9.8
        W                                                0      0.0
      WNW                                                0      0.0
       NW                                                0      0.0
      NNW                                                0      0.0

     CALM                                                0      0.0

COL. TOTALS   50.0          50.0                         2              6.2
2000 METER LEVEL WINDS AFTERNOON   DECEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N                                                0      0.0
      NNE                                                0      0.0
       NE                                                0      0.0
      ENE                                                0      0.0
        E                                                0      0.0
      ESE                                                0      0.0
       SE                                                0      0.0
      SSE                                                0      0.0
        S                                                0      0.0
      SSW                                                0      0.0
       SW                                                0      0.0
      WSW                                                0      0.0
        W                   50.0  50.0                   2    100.0     9.0
      WNW                                                0      0.0
       NW                                                0      0.0
      NNW                                                0      0.0

     CALM                                                0      0.0

COL. TOTALS                 50.0  50.0                   2              9.0
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2500 METER LEVEL WINDS MORNING     DECEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N                                                0      0.0
      NNE                                                0      0.0
       NE                                                0      0.0
      ENE                                                0      0.0
        E                                                0      0.0
      ESE                                                0      0.0
       SE                                                0      0.0
      SSE                                                0      0.0
        S                                                0      0.0
      SSW                                                0      0.0
       SW                                                0      0.0
      WSW                                                0      0.0
        W                                                0      0.0
      WNW                                                0      0.0
       NW                                                0      0.0
      NNW                                                0      0.0

     CALM                                                0      0.0

COL. TOTALS                                              0
2500 METER LEVEL WINDS AFTERNOON   DECEMBER,1979
  DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
              00.1  03.0  06.0  10.0  16.0  GREATER       ROW   SUMMARY
               TO    TO    TO    TO    TO    THAN      TOTAL   TOTAL  AVERAGE
              02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

        N                                                0      0.0
      NNE                                                0      0.0
       NE                                                0      0.0
      ENE                                                0      0.0
        E                                                0      0.0
      ESE                                                0      0.0
       SE                                                0      0.0
      SSE                                                0      0.0
        S                                                0      0.0
      SSW                                                0      0.0
       SW                                                0      0.0
      WSW                                                0      0.0
        W                                                0      0.0
      WNW                                                0      0.0
       NW                                                0      0.0
      NNW                                                0      0.0

     CALM                                                0      0.0

COL. TOTALS                                              0
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
        SURFACE WINDS MORNING     JANUARY,1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN      TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

         N   25.0  12.5                                   3    37.5    1.6
       NNE         12.5                                   1    12.5    3.3
        NE                                                0     0.0
       ENE                                                0     0.0
         E                                                0     0.0
       ESE                                                0     0.0
        SE                                                0     0.0
       SSE                                                0     0.0
         S                                                0     0.0
       SSW                                                0     0.0
        SW                                                0     0.0
       WSW                                                0     0.0
         W                                                0     0.0
       WNW                                                0     0.0
        NW   12.5                                         1    12.5     .6
       NNW                                                0     0.0

    CALM                                                  3    37.0

OL. TOTALS   37.5  25.0                                   8             1.1
        SURFACE WINDS AFTERNOON   JANUARY,1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN      TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

         N                                                0     0.0
       NNE          9.0                                   1     9.0    4.4
        NE                                                0     0.0
       ENE                                                0     0.0
         E                                                0     0.0
       ESE                                                0     0.0
        SE                                                0     0.0
       SSE                                                0     0.0
         S    9.0                                         1     9.0     .7
       SSW   18.1                                         2    18.1     .7
        SW   18.1                                         2    18.1     .9
       WSW    9.0                                         1     9.0    1.8
         W    9.0                                         1     9.0     .8
       WNW    9.0                                         1     9.0     .4
        NW   18.1                                         2    18.1     .5
       NNW                                                0     0.0

    CALM                                                  0     0.0

OL. TOTALS   90.3   9.0                                  11             1.1
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          FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
100 METER LEVEL WINDS MORNING     JANUARY,1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN      TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

         N   12.5                                         1    12.5     .7
       NNE   12.5        12.5                             2    25.0    5.7
        NE               12.5                             1    12.5    9.9
       ENE                                                0     0.0
         E                                                0     0.0
       ESE                                                0     0.0
        SE                                                0     0.0
       SSE                                                0     0.0
         S   12.5                                         1    12.5    2.1
       SSW                                                0     0.0
        SW                                                0     0.0
       WSW                                                0     0.0
         W   12.5                                         1    12.5    1.8
       WNW                                                0     0.0
        NW                                                0     0.0
       NNW   12.5  12.5                                   2    25.0    2.4

    CALM                                                  0     0.0

COL. TOTALS  62.5  12.5  25.0                             8             3.8
100 METER LEVEL WINDS AFTERNOON   JANUARY,1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
             00.1  03.0  06.0  10.0  16.0  GREATER      ROW  SUMMARY
              TO    TO    TO    TO    TO    THAN      TOTAL  TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0      COUNT  PERCENT  SPEED

         N                                                0     0.0
       NNE    9.0         9.0                             2    18.0    4.7
        NE                                                0     0.0
       ENE                                                0     0.0
         E                                                0     0.0
       ESE                                                0     0.0
        SE                                                0     0.0
       SSE          9.0                                   1     9.0    5.2
         S   27.2                                         3    27.2    1.0
       SSW                                                0     0.0
        SW                                                0     0.0
       WSW          9.0                                   1     9.0    3.2
         W    9.0   9.0                                   2    18.0    3.4
       WNW                                                0     0.0
        NW    9.0                                         1     9.0    1.0
       NNW    9.0                                         1     9.0    2.2

    CALM                                                  0     0.0

COL. TOTALS  63.2  27.0   9.0                            11             2.8
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING   JANUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	************************* ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			12.5		12.5		2	25.0	13.6
ENE							0	0.0	
E							0	0.0	
ESE	12.5						1	12.5	2.8
SE							0	0.0	
SSE							0	0.0	
S	12.5	37.5					4	50.0	4.4
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW		12.5					1	12.5	5.8
CALM							0	0.0	
COL. TOTALS	25.0	50.0	12.5		12.5		8		6.7

200 METER LEVEL WINDS AFTERNOON   JANUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	************************* ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	9.0						1	9.0	2.4
NNE							0	0.0	
NE			9.0				1	9.0	8.0
ENE	18.1						2	18.1	1.4
E	9.0						1	9.0	1.0
ESE							0	0.0	
SE							0	0.0	
SSE	9.0			9.0			2	18.0	6.7
S	9.0	9.0					2	18.0	2.3
SSW							0	0.0	
SW							0	0.0	
WSW		9.0					1	9.0	3.3
W							0	0.0	
WNW		9.0					1	9.0	4.5
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	54.1	27.0	9.0	9.0			11		3.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING   JANUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	************************* ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		12.5					1	12.5	4.8
NNE							0	0.0	
NE		12.5	12.5				2	25.0	6.5
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	12.5	12.5					2	25.0	4.1
SSE			25.0	12.5			3	37.5	9.2
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	12.5	37.5	37.5	12.5			8		6.7

300 METER LEVEL WINDS AFTERNOON   JANUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	************************* ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		9.0					1	9.0	3.2
NE	9.0	9.0					2	18.0	3.6
ENE							0	0.0	
E		9.0					1	9.0	4.3
ESE							0	0.0	
SE	9.0						1	9.0	2.5
SSE		9.0					1	9.0	4.9
S		9.0		9.0			2	18.0	8.8
SSW							0	0.0	
SW							0	0.0	
WSW	9.0	9.0					2	18.0	2.9
W							0	0.0	
WNW		9.0					1	9.0	5.9
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	63.0		9.0			11		4.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING JANUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND								
N		12.5					1	12.5	5.0
NNE							0	0.0	
NE			25.0				2	25.0	6.9
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		12.5					1	12.5	4.6
SSE			25.0	12.5	12.5		4	50.0	10.6
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		25.0	50.0	12.5	12.5		8		8.2

500 METER LEVEL WINDS AFTERNOON JANUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND								
N							0	0.0	
NNE			10.0				1	10.0	6.7
NE							0	0.0	
ENE	10.0						1	10.0	1.2
E							0	0.0	
ESE		10.0					1	10.0	4.1
SE			10.0				1	10.0	6.6
SSE		10.0					1	10.0	5.1
S	10.0	10.0					2	20.0	3.6
SSW							0	0.0	
SW							0	0.0	
WSW			10.0				1	10.0	6.8
W							0	0.0	
WNW				10.0			1	10.0	12.5
NW							0	0.0	
NNW		10.0					1	10.0	3.5
CALM							0	0.0	
COL. TOTALS	20.0	40.0	30.0	10.0			10		5.3

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING JANUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND								
N							0	0.0	
NNE				14.2			1	14.2	11.9
NE							0	0.0	
ENE							0	0.0	
E		14.2					1	14.2	3.6
ESE							0	0.0	
SE							0	0.0	
SSE		14.2					1	14.2	4.7
S			14.2	14.2	14.2		3	42.6	12.2
SSW	14.2						1	14.2	2.8
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	14.2	28.4	14.2	28.4	14.2		7		8.5

750 METER LEVEL WINDS AFTERNOON JANUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND								
N							0	0.0	
NNE							0	0.0	
NE		10.0					1	10.0	4.2
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE			10.0				1	10.0	6.2
SSE			10.0				1	10.0	9.8
S		10.0		10.0			2	20.0	8.9
SSW							0	0.0	
SW	20.0						2	20.0	2.4
WSW			10.0				1	10.0	6.8
W							0	0.0	
WNW	10.0		10.0				2	20.0	4.5
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	30.0	20.0	40.0	10.0			10		5.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING JANUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						*********	ROW	SUMMARY
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE				14.2			1	14.2	14.9
ENE							0	0.0	
E							0	0.0	
ESE		14.2					1	14.2	3.4
SE							0	0.0	
SSE		14.2					1	14.2	5.7
S	14.2				14.2		2	28.4	8.8
SSW		14.2	14.2				2	28.4	5.3
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	14.2	42.6	14.2	14.2	14.2		7		7.4

1000 METER LEVEL WINDS AFTERNOON JANUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						*********	ROW	SUMMARY
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	10.0						1	10.0	2.0
E							0	0.0	
ESE	10.0						1	10.0	.5
SE							0	0.0	
SSE							0	0.0	
S	10.0		10.0				2	20.0	4.5
SSW		10.0			10.0		2	20.0	11.3
SW			10.0				1	10.0	6.5
WSW		10.0					1	10.0	5.4
W							0	0.0	
WNW	10.0		10.0				2	20.0	5.7
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	40.0	20.0	30.0		10.0		10		5.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING JANUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						*********	ROW	SUMMARY
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	20.0						1	20.0	1.9
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW			20.0	20.0			2	40.0	9.1
WSW							0	0.0	
W		20.0					1	20.0	5.4
WNW							0	0.0	
NW	20.0						1	20.0	1.1
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	40.0	20.0	20.0	20.0			5		5.3

1500 METER LEVEL WINDS AFTERNOON JANUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						*********	ROW	SUMMARY
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE		12.5					1	12.5	3.0
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	12.5						1	12.5	.9
S							0	0.0	
SSW		12.5					1	12.5	5.5
SW		12.5		12.5			2	25.0	10.0
WSW							0	0.0	
W			12.5				1	12.5	7.9
WNW		12.5					1	12.5	5.3
NW				12.5			1	12.5	10.5
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	12.5	50.0	12.5	25.0			8		6.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2000 METER LEVEL WINDS MORNING JANUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW				100.0			1	100.0	12.6
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS				100.0			1		12.6

2000 METER LEVEL WINDS AFTERNOON JANUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW		14.2					1	14.2	5.7
SW				14.2			1	14.2	11.4
WSW			14.2				1	14.2	7.6
W			14.2				1	14.2	7.0
WNW			14.2				1	14.2	6.1
NW							0	0.0	
NNW			14.2	14.2			2	28.4	10.5
CALM							0	0.0	
COL. TOTALS		14.2	56.8	28.4			7		8.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2500 METER LEVEL WINDS MORNING JANUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

2500 METER LEVEL WINDS AFTERNOON JANUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND *********								
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND **************************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	12.5						1	12.5	.4
NNE	12.5						1	12.5	.6
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	12.5						1	12.5	2.7
S	12.5						1	12.5	.9
SSW							0	0.0	
SW	12.5						1	12.5	.2
WSW							0	0.0	
W	12.5						1	12.5	1.5
WNW	12.5						1	12.5	.6
NW							0	0.0	
NNW							0	0.0	
CALM							1	12.0	
COL. TOTALS	87.5						8		.8

SURFACE WINDS AFTERNOON FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND **************************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	10.0						1	10.0	.2
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	20.0						2	20.0	1.2
SSE	40.0						4	40.0	.8
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW	10.0						1	10.0	.4
NNW							0	0.0	
CALM							2	20.0	
COL. TOTALS	80.0						10		.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND **************************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	25.0		12.5				3	37.5	3.4
NNE	12.5						1	12.5	1.7
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			25.0				2	25.0	7.2
S							0	0.0	
SSW							0	0.0	
SW	12.5						1	12.5	1.0
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	12.5						1	12.5	2.3
CALM							0	0.0	
COL. TOTALS	62.5		37.5				8		3.7

100 METER LEVEL WINDS AFTERNOON FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND **************************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	20.0						2	20.0	.8
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		20.0					2	20.0	5.4
S	20.0						2	20.0	1.0
SSW	10.0						1	10.0	.3
SW	20.0						2	20.0	.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW	10.0						1	10.0	1.5
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	80.0	20.0					10		1.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					************	ROW	SUMMARY	************
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N	12.5		12.5				2	25.0	4.2
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	12.5						1	12.5	1.5
S	12.5			12.5			2	25.0	6.5
SSW		12.5					1	12.5	5.0
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	25.0						2	25.0	1.2
CALM							0	0.0	
COL. TOTALS	62.5	12.5	12.5	12.5			8		3.8

200 METER LEVEL WINDS AFTERNCON FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					************	ROW	SUMMARY	************
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N	10.0						1	10.0	.9
NNE	10.0						1	10.0	1.5
NE							0	0.0	
ENE							0	0.0	
E	10.0						1	10.0	.7
ESE							0	0.0	
SE	10.0						1	10.0	1.8
SSE	10.0						1	10.0	2.3
S	10.0		10.0				2	20.0	3.4
SSW		10.0					1	10.0	3.9
SW	10.0						1	10.0	.4
WSW							0	0.0	
W	10.0						1	10.0	1.6
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	80.0	10.0	10.0				10		2.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					************	ROW	SUMMARY	************
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S			16.6				1	16.6	6.0
SSW	16.6		16.6				2	33.2	5.2
SW			16.6				1	16.6	7.0
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW	16.6						1	16.6	.5
NNW	16.6						1	16.6	1.5
CALM							0	0.0	
COL. TOTALS	49.8		49.8				6		4.2

300 METER LEVEL WINDS AFTERNCON FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********					************	ROW	SUMMARY	************
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		10.0					1	10.0	5.5
NE							0	0.0	
ENE							0	0.0	
E	10.0						1	10.0	1.0
ESE							0	0.0	
SE		10.0					1	10.0	3.8
SSE	10.0	10.0					2	20.0	2.1
S	10.0						1	10.0	2.3
SSW			10.0				1	10.0	6.9
SW							0	0.0	
WSW	30.0						3	30.0	1.9
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	60.0	30.0	10.0				10		2.9

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	**************************							
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		16.6	16.6				2	33.2	6.1
S							0	0.0	
SSW							0	0.0	
SW		16.6	33.3				3	49.9	6.5
WSW							0	0.0	
W							0	0.0	
WNW	16.6						1	16.6	1.2
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	16.6	33.2	49.9				6		5.5

500 METER LEVEL WINDS AFTERNCON FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	**************************							
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	10.0	10.0					2	20.0	2.5
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		10.0					1	10.0	3.6
SSE	10.0	10.0	10.0				3	30.0	4.5
S		10.0					1	10.0	3.6
SSW	10.0						1	10.0	1.9
SW		10.0	10.0				2	20.0	5.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	30.0	50.0	20.0				10		3.9

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	**************************							
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	16.6	16.6					2	33.2	1.6
S							0	0.0	
SSW							0	0.0	
SW			16.6	33.3			3	49.9	11.0
WSW							0	0.0	
W	16.6						1	16.6	1.5
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	33.2	16.6	16.6	33.3			6		6.2

750 METER LEVEL WINDS AFTERNCON FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	**************************							
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		10.0					1	10.0	3.4
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			10.0				1	10.0	8.9
S	10.0	10.0					2	20.0	3.6
SSW		10.0					1	10.0	5.0
SW		10.0	10.0				2	20.0	6.3
WSW	10.0		10.0				2	20.0	3.6
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	10.0						1	10.0	2.3
CALM							0	0.0	
COL. TOTALS	30.0	40.0	30.0				10		4.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING   FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ************************** 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW			16.6				1	16.6	8.0
SW				33.3			2	33.3	12.0
WSW							0	0.0	
W		16.6					1	16.6	3.8
WNW	16.6	16.6					2	33.2	2.6
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	16.6	33.2	16.6	33.3			6		6.8

1000 METER LEVEL WINDS AFTERNOON FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ************************** 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S		10.0					1	10.0	3.3
SSW			10.0				1	10.0	8.0
SW			20.0	10.0			3	30.0	9.3
WSW			10.0				1	10.0	7.9
W	20.0		10.0				3	30.0	4.0
WNW							0	0.0	
NW							0	0.0	
NNW	10.0						1	10.0	1.7
CALM							0	0.0	
COL. TOTALS	30.0	10.0	50.0	10.0			10		6.1

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING   FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ************************** 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAG SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW					25.0		1	25.0	17.0
WSW	25.0			25.0			2	50.0	7.6
W		25.0					1	25.0	4.6
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	25.0	25.0		25.0	25.0		4		9.2

1500 METER LEVEL WINDS AFTERNOON FEBRUARY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ************************** 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAG SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S		10.0					1	10.0	4.6
SSW							0	0.0	
SW			10.0		10.0		2	20.0	13.9
WSW				10.0			1	10.0	10.9
W		10.0	10.0				2	20.0	7.6
WNW	10.0		20.0				3	30.0	5.9
NW							0	0.0	
NNW	10.0						1	10.0	1.7
CALM							0	0.0	
COL. TOTALS	20.0	20.0	40.0	10.0	10.0		10		7.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2000 METER LEVEL WINDS MORNING FEBRUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND						*******************		
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW	50.0		50.0				2	100.0	4.9
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	50.0		50.0				2		4.9

2000 METER LEVEL WINDS AFTERNOON FEBRUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND						*******************		
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S			16.6				1	16.6	8.1
SSW							0	0.0	
SW					16.6		1	16.6	16.9
WSW							0	0.0	
W			33.3	16.6			3	49.9	8.7
WNW			16.6				1	16.6	9.6
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS			66.5	16.6	16.6		6		10.1

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2500 METER LEVEL WINDS MORNING FEBRUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND						*******************		
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

2500 METER LEVEL WINDS AFTERNOON FEBRUARY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND						*******************		
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING MARCH, 1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	9.0						1	9.0	2.6
NNE	9.0						1	9.0	2.1
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	27.2						3	27.2	1.9
SSE	9.0						1	9.0	1.3
S	9.0						1	9.0	2.0
SSW	9.0						1	9.0	1.0
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW	9.0						1	9.0	.7
NNW							0	0.0	
CALM							2	18.0	
COL. TOTALS	81.2						11		1.4

SURFACE WINDS AFTERNOON MARCH, 1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	16.6						2	16.6	1.9
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	33.3						4	33.3	2.3
SSE	8.3						1	8.3	2.5
S	16.6						2	16.6	1.3
SSW	8.3						1	8.3	1.6
SW	8.3	8.3					2	16.6	2.7
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	91.4	8.3					12		2.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING MARCH, 1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TC 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	9.0	9.0	9.0				3	27.0	4.6
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	9.0						1	9.0	1.5
SSE	9.0	9.0	18.1	9.0			5	45.1	6.4
S							0	0.0	
SSW			9.0				1	9.0	9.0
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	9.0						1	9.0	2.9
CALM							0	0.0	
COL. TOTALS	36.0	18.0	36.1	9.0			11		5.4

100 METER LEVEL WINDS AFTERNOON MARCH, 1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	8.3						1	8.3	2.3
NE		8.3					1	8.3	4.2
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE			8.3				1	8.3	6.8
SSE	8.3	16.6	16.6				5	41.5	5.4
S		8.3					1	8.3	3.7
SSW		16.6					2	16.6	4.8
SW							0	0.0	
WSW			8.3				1	8.3	9.5
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	16.6	49.8	33.2				12		5.2

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CC - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		9.0	9.0				2	18.0	6.9
ENE			9.0				1	9.0	6.7
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			18.1	9.0			3	27.1	8.9
S	9.0		9.0				2	18.0	3.9
SSW							0	0.0	
SW		9.0		9.0			2	18.0	7.2
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW			9.0				1	9.0	8.0
CALM							0	0.0	
COL. TOTALS	9.0	18.0	54.1	18.0			11		7.0

200 METER LEVEL WINDS AFTERNOON MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		8.3					1	8.3	3.4
NE							0	0.0	
ENE				8.3			1	8.3	11.1
E							0	0.0	
ESE							0	0.0	
SE		8.3	8.3				2	16.6	5.5
SSE	8.3	8.3	8.3	8.3			4	33.2	6.1
S		8.3					1	8.3	4.0
SSW	8.3						1	8.3	2.4
SW			8.3				1	8.3	6.0
WSW					8.3		1	8.3	17.5
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	16.6	33.2	24.9	16.6	8.3		12		6.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N		9.0					1	9.0	5.4
NNE			9.0				1	9.0	6.7
NE	9.0						1	9.0	1.1
ENE			9.0				1	9.0	6.4
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE				9.0			1	9.0	13.2
S			18.1				2	18.1	7.2
SSW			9.0				1	9.0	6.1
SW	9.0		9.0				2	18.0	5.4
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW			9.0				1	9.0	9.1
CALM							0	0.0	
COL. TOTALS	18.0	9.0	63.1	9.0			11		6.6

300 METER LEVEL WINDS AFTERNOON MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N		9.0					1	9.0	4.5
NNE							0	0.0	
NE		9.0					1	9.0	5.4
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	9.0		9.0				2	18.0	4.4
S		27.2	9.0	9.0			5	45.2	6.3
SSW							0	0.0	
SW			9.0				1	9.0	6.3
WSW						9.0	1	9.0	41.7
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	9.0	45.2	27.0	9.0		9.0	11		8.9

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		9.0					1	9.0	5.6
NNE							0	0.0	
NE	9.0						1	9.0	2.6
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	9.0						1	9.0	1.6
SSE		9.0					1	9.0	3.1
S			18.1				2	18.1	7.6
SSW			9.0				1	9.0	6.2
SW			9.0				1	9.0	9.2
WSW	9.0		9.0				2	18.0	5.6
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW			9.0				1	9.0	8.3
CALM							0	0.0	
COL. TOTALS	27.0	18.0	54.1				11		5.7

500 METER LEVEL WINDS AFTERNOON MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			9.0	9.0			2	18.0	11.0
ENE							0	0.0	
E							0	0.0	
ESE	9.0						1	9.0	1.3
SE							0	0.0	
SSE		18.1	9.0				3	27.1	5.2
S				9.0			1	9.0	12.0
SSW		9.0	18.1				3	27.1	6.6
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	9.0						1	9.0	2.3
CALM							0	0.0	
COL. TOTALS	18.0	27.1	36.1	18.0			11		6.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	9.0						1	9.0	2.4
NE	9.0						1	9.0	.5
ENE	9.0						1	9.0	1.4
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			9.0				1	9.0	6.4
S		9.0					1	9.0	4.7
SSW		9.0	9.0				2	18.0	7.5
SW	9.0			9.0			2	18.0	7.2
WSW			9.0				1	9.0	8.2
W	9.0						1	9.0	2.0
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.0	18.0	27.0	9.0			11		5.0

750 METER LEVEL WINDS AFTERNOON MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			9.0				1	9.0	7.0
NE							0	0.0	
ENE							0	0.0	
E	9.0						1	9.0	.9
ESE							0	0.0	
SE							0	0.0	
SSE		9.0					1	9.0	5.3
S		9.0	9.0				2	18.0	5.4
SSW		9.0					1	9.0	3.8
SW			9.0				1	9.0	7.8
WSW		9.0		18.1			3	27.1	9.8
W							0	0.0	
WNW	9.0						1	9.0	1.5
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	18.0	36.0	27.0	18.1			11		6.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					********************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			9.0				1	9.0	6.6
NE							0	0.0	
ENE							0	0.0	
E	9.0						1	9.0	2.7
ESE	9.0						1	9.0	.8
SE							0	0.0	
SSE							0	0.0	
S		9.0					1	9.0	4.8
SSW							0	0.0	
SW	9.0	9.0	9.0	9.0			4	36.0	6.6
WSW							0	0.0	
W	9.0			9.0			2	18.0	5.8
WNW							0	0.0	
NW		9.0					1	9.0	5.7
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	36.0	27.0	18.0	18.0			11		5.3

1000 METER LEVEL WINDS AFTERNOON MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					********************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	9.0			9.0			2	18.0	6.7
NE	9.0						1	9.0	2.1
ENE							0	0.0	
E	9.0						1	9.0	2.7
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S			9.0				1	9.0	7.8
SSW							0	0.0	
SW		9.0	9.0				2	18.0	6.8
WSW		9.0	18.1				3	27.1	5.8
W			9.0				1	9.0	8.4
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	18.0	45.1	9.0			11		5.9

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					********************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE		9.0					1	9.0	4.2
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S		9.0					1	9.0	4.4
SSW		9.0					1	9.0	3.6
SW			18.1				2	18.1	7.6
WSW							0	0.0	
W			9.0	18.1			3	27.1	10.1
WNW		18.1					2	18.1	4.3
NW		9.0					1	9.0	4.6
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		54.1	27.1	18.1			11		6.4

1500 METER LEVEL WINDS AFTERNOON MARCH,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					********************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	11.1			11.1			2	22.2	7.1
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		11.1					1	11.1	3.0
S							0	0.0	
SSW							0	0.0	
SW			33.3				3	33.3	7.6
WSW							0	0.0	
W	11.1	11.1	11.1				3	33.3	4.7
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	22.2	22.2	44.4	11.1			9		6.0

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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2000 METER LEVEL WINDS MORNING        MARCH,1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

     N            16.6                                1     16.6     4.4
   NNE            16.6                                1     16.6     3.3
    NE                                                0      0.0
   ENE                                                0      0.0
     E                                                0      0.0
   ESE                                                0      0.0
    SE                                                0      0.0
   SSE                                                0      0.0
     S                                                0      0.0
   SSW                                                0      0.0
    SW                                                0      0.0
   WSW                  16.6                          1     16.6     9.8
     W            16.6        16.6                    2     33.2    10.8
   WNW                        16.6                    1     16.6    15.7
    NW                                                0      0.0
   NNW                                                0      0.0

  CALM                                                0      0.0

COL. TOTALS       49.8  16.6  33.2                    6              9.1
2000 METER LEVEL WINDS AFTERNOON      MARCH,1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

     N                                                0      0.0
   NNE      14.2                                      1     14.2      .8
    NE                                                0      0.0
   ENE            14.2                                1     14.2     4.4
     E                                                0      0.0
   ESE                                                0      0.0
    SE                                                0      0.0
   SSE                                                0      0.0
     S                                                0      0.0
   SSW      14.2  14.2                                2     28.4     2.8
    SW                                                0      0.0
   WSW                        14.2                    1     14.2    12.5
     W                  14.2                          1     14.2     9.0
   WNW                                                0      0.0
    NW      14.2                                      1     14.2     1.9
   NNW                                                0      0.0

  CALM                                                0      0.0

COL. TOTALS 42.6  28.4  14.2  14.2                    7              4.9
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              FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
2500 METER LEVEL WINDS MORNING        MARCH,1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

     N                                                0      0.0
   NNE                                                0      0.0
    NE                                                0      0.0
   ENE                                                0      0.0
     E                                                0      0.0
   ESE                                                0      0.0
    SE                                                0      0.0
   SSE                                                0      0.0
     S                                                0      0.0
   SSW                                                0      0.0
    SW                                                0      0.0
   WSW                                                0      0.0
     W                                                0      0.0
   WNW                                                0      0.0
    NW                                                0      0.0
   NNW                                                0      0.0

  CALM                                                0      0.0

COL. TOTALS                                           0
2500 METER LEVEL WINDS AFTERNOON      MARCH,1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND **************************
            00.1  03.0  06.0  10.0  16.0  GREATER     ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

     N                                                0      0.0
   NNE                                                0      0.0
    NE                                                0      0.0
   ENE                                                0      0.0
     E                                                0      0.0
   ESE                                                0      0.0
    SE                                                0      0.0
   SSE                                                0      0.0
     S                                                0      0.0
   SSW                                                0      0.0
    SW                                                0      0.0
   WSW                                                0      0.0
     W                                                0      0.0
   WNW                                                0      0.0
    NW                                                0      0.0
   NNW                                                0      0.0

  CALM                                                0      0.0

COL. TOTALS                                           0
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING   APRIL.1980

DIRECTION	WIND SPEEDS METERS/SECOND								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	11.1						1	11.1	1.1
NNE	22.2	22.2					4	44.4	2.6
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S	11.1						1	11.1	2.5
SSW							0	0.0	
SW							0	0.0	
WSW	11.1						1	11.1	.4
W	11.1						1	11.1	1.1
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							1	11.0	
COL. TOTALS	66.6	22.2					9		1.7

SURFACE WINDS AFTERNOON   APRIL.1980

DIRECTION	WIND SPEEDS METERS/SECOND								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		9.0					1	9.0	3.8
NE		9.0					1	9.0	3.1
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	36.3						4	36.3	1.9
SSE	18.1						2	18.1	1.7
S							0	0.0	
SSW							0	0.0	
SW	9.0						1	9.0	1.3
WSW							0	0.0	
W	9.0						1	9.0	1.0
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							1	9.0	
COL. TOTALS	72.4	18.0					11		1.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING   APRIL.1980

DIRECTION	WIND SPEEDS METERS/SECOND								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		11.1					1	11.1	5.0
NNE		11.1	11.1	22.2			4	44.4	10.1
NE			11.1				1	11.1	6.1
ENE							0	0.0	
E	11.1						1	11.1	.4
ESE							0	0.0	
SE							0	0.0	
SSE		11.1					1	11.1	4.6
S							0	0.0	
SSW			11.1				1	11.1	6.4
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	33.3	33.3	22.2			9		7.0

100 METER LEVEL WINDS AFTERNOON   APRIL.1980

DIRECTION	WIND SPEEDS METERS/SECOND								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	18.1						2	18.1	.9
NNE					9.0		1	9.0	24.1
NE			9.0				1	9.0	8.5
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		9.0	9.0				2	18.0	6.7
SSE							0	0.0	
S	18.1	9.0			9.0		4	36.1	6.0
SSW							0	0.0	
SW		9.0					1	9.0	3.2
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	36.2	27.0	18.0		18.0		11		6.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING APRIL,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N			11.1				1	11.1	9.6
NNE			11.1	22.2	11.1		4	44.4	14.7
NE		11.1					1	11.1	4.6
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW		22.2					2	22.2	4.0
SW				11.1			1	11.1	10.1
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		33.3	22.2	33.3	11.1		9		10.1

200 METER LEVEL WINDS AFTERNOON APRIL,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	9.0					9.0	2	18.0	21.0
NNE							0	0.0	
NE				9.0			1	9.0	11.0
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE			9.0				1	9.0	8.4
SSE		9.0		9.0			2	18.0	8.8
S	27.2						3	27.2	1.5
SSW		9.0					1	9.0	3.4
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW		9.0					1	9.0	4.7
CALM							0	0.0	
COL. TOTALS	36.2	27.0	9.0	18.0		9.0	11		8.3

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING APRIL,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			22.2	22.2			4	44.4	9.7
NE			11.1				1	11.1	9.5
ENE		11.1					1	11.1	4.2
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		11.1					1	11.1	5.4
S		11.1					1	11.1	4.3
SSW							0	0.0	
SW			11.1				1	11.1	9.6
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		33.3	44.4	22.2			9		7.9

300 METER LEVEL WINDS AFTERNOON APRIL,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	9.0						1	9.0	1.0
NNE							0	0.0	
NE				9.0			1	9.0	10.5
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	9.0		9.0				2	18.0	4.7
SSE	9.0			9.0			2	18.0	6.7
S		18.1					2	18.1	4.2
SSW	9.0						1	9.0	2.8
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW		9.0		9.0			2	18.0	7.6
CALM							0	0.0	
COL. TOTALS	36.0	27.1	9.0	27.0			11		5.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING APRIL,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		11.1					1	11.1	4.0
NNE		11.1	22.2				3	33.3	7.5
NE			11.1				1	11.1	8.9
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		11.1					1	11.1	4.1
SSE			11.1				1	11.1	8.0
S			11.1				1	11.1	6.0
SSW							0	0.0	
SW				11.1			1	11.1	10.6
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		33.3	55.5	11.1			9		7.1

500 METER LEVEL WINDS AFTERNOON APRIL,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N				9.0			1	9.0	14.2
NNE	9.0	9.0	9.0				3	27.0	4.9
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	9.0		18.1				3	27.1	6.2
S	9.0	9.0					2	18.0	3.3
SSW	9.0						1	9.0	2.0
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW	9.0						1	9.0	1.5
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.0	18.0	27.1	9.0			11		5.2

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING APRIL,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		12.5					1	12.5	4.7
NNE			12.5				1	12.5	6.7
NE	12.5		12.5				2	25.0	4.9
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW			25.0				2	25.0	7.3
SW	12.5		12.5				2	25.0	4.3
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	25.0	12.5	62.5				8		5.5

750 METER LEVEL WINDS AFTERNOON APRIL,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE				9.0			1	9.0	12.8
NE			9.0				1	9.0	9.3
ENE							0	0.0	
E	9.0						1	9.0	1.4
ESE							0	0.0	
SE							0	0.0	
SSE		18.1	9.0				3	27.1	5.6
S				9.0			1	9.0	10.2
SSW	9.0	9.0					2	18.0	3.2
SW							0	0.0	
WSW							0	0.0	
W	9.0		9.0				2	18.0	4.9
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	27.1	27.0	18.0			11		6.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING APRIL,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	**********	**********	**********	**********	**********	ROW	SUMMARY	******
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		12.5					1	12.5	4.6
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE		12.5					1	12.5	5.7
SSE							0	0.0	
S			12.5				1	12.5	6.6
SSW		12.5	12.5				2	25.0	5.9
SW							0	0.0	
WSW			12.5				1	12.5	9.6
W							0	0.0	
WNW	12.5						1	12.5	1.9
NW							0	0.0	
NNW		12.5					1	12.5	4.6
CALM							0	0.0	
COL. TOTALS	12.5	50.0	37.5				8		5.6

1000 METER LEVEL WINDS AFTERNOON APRIL,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	**********	**********	**********	**********	**********	ROW	SUMMARY	******
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE						10.0	1	10.0	26.9
NE						10.0	1	10.0	25.1
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	10.0						1	10.0	1.8
SSE			10.0				1	10.0	6.3
S		10.0	10.0	10.0			3	30.0	9.2
SSW		10.0					1	10.0	4.3
SW			10.0				1	10.0	6.0
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW			10.0				1	10.0	6.9
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	10.0	20.0	40.0	10.0		20.0	10		10.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING APRIL,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	**********	**********	**********	**********	**********	ROW	SUMMARY	******
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		14.2					1	14.2	4.2
ENE							0	0.0	
E			14.2				1	14.2	6.6
ESE							0	0.0	
SE			14.2				1	14.2	6.8
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW		14.2	14.2				2	28.4	6.2
W							0	0.0	
WNW		14.2					1	14.2	5.1
NW							0	0.0	
NNW		14.2					1	14.2	3.2
CALM							0	0.0	
COL. TOTALS		56.8	42.6				7		5.8

1500 METER LEVEL WINDS AFTERNOON APRIL,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	**********	**********	**********	**********	**********	ROW	SUMMARY	******
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N		10.0	10.0				2	20.0	6.5
NNE					10.0		1	10.0	21.3
NE							0	0.0	
ENE			10.0				1	10.0	9.7
E							0	0.0	
ESE		10.0					1	10.0	4.0
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW		20.0	10.0				3	30.0	6.9
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW		10.0	10.0				2	20.0	5.6
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		50.0	40.0		10.0		10		8.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2000 METER LEVEL WINDS MORNING APRIL.1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE				25.0			1	25.0	13.6
SE					25.0		1	25.0	16.8
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW			25.0				1	25.0	8.1
W							0	0.0	
WNW			25.0				1	25.0	7.6
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
OL. TOTALS			50.0	25.0	25.0		4		11.5

000 METER LEVEL WINDS AFTERNOON APRIL.1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N			12.5				1	12.5	6.3
NNE						12.5	1	12.5	27.7
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE		12.5		12.5			2	25.0	10.3
SE							0	0.0	
SSE							0	0.0	
S			12.5				1	12.5	7.1
SSW		12.5					1	12.5	5.7
SW			12.5				1	12.5	6.4
WSW							0	0.0	
W			12.5				1	12.5	6.3
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
OL. TOTALS		25.0	50.0	12.5		12.5	8		10.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2500 METER LEVEL WINDS MORNING APRIL.1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

2500 METER LEVEL WINDS AFTERNOON APRIL.1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	14.2						1	14.2	2.5
NE	14.2						1	14.2	2.2
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S	14.2						1	14.2	1.6
SSW	14.2						1	14.2	.7
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW	14.2						1	14.2	1.6
NW	14.2						1	14.2	2.5
NNW							0	0.0	
CALM							1	14.0	
COL. TOTALS	85.2						7		1.5

SURFACE WINDS AFTERNOON MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	12.5						1	12.5	1.6
NNE		12.5					1	12.5	3.8
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		12.5					1	12.5	5.6
S		12.5					1	12.5	5.1
SSW	12.5						1	12.5	.9
SW							0	0.0	
WSW		12.5					1	12.5	3.3
W	25.0						2	25.0	2.3
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	50.0	50.0					8		3.1

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		28.5	14.2				3	42.7	4.6
NNE				14.2			1	14.2	10.5
NE			14.2				1	14.2	7.6
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		14.2					1	14.2	4.0
S							0	0.0	
SSW	14.2						1	14.2	.1
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	14.2	42.7	28.4	14.2			7		5.2

100 METER LEVEL WINDS AFTERNOON MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	12.5						1	12.5	2.3
NNE			12.5				1	12.5	6.1
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		12.5					1	12.5	3.2
S		12.5					1	12.5	4.1
SSW							0	0.0	
SW	12.5						1	12.5	1.3
WSW							0	0.0	
W	12.5						1	12.5	1.4
WNW		12.5	12.5				2	25.0	5.2
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	37.5	37.5	25.0				8		3.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING MAY.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		14.2					1	14.2	5.4
NNE	14.2		14.2	14.2			3	42.6	8.2
NE		14.2					1	14.2	3.8
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE			14.2				1	14.2	6.1
S	14.2						1	14.2	1.5
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	28.4	28.4	28.4	14.2			7		5.9

200 METER LEVEL WINDS AFTERNOON MAY.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		12.5					1	12.5	5.0
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		12.5					1	12.5	3.9
S			12.5				1	12.5	8.0
SSW							0	0.0	
SW							0	0.0	
WSW	25.0						2	25.0	1.2
W							0	0.0	
WNW			12.5				1	12.5	8.9
NW	12.5						1	12.5	1.6
NNW		12.5					1	12.5	3.6
CALM							0	0.0	
COL. TOTALS	37.5	37.5	25.0				8		4.1

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING MAY.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			28.5	14.2			3	42.7	6.8
NE							0	0.0	
ENE							0	0.0	
E		14.2					1	14.2	5.4
ESE							0	0.0	
SE	14.2						1	14.2	2.6
SSE							0	0.0	
S		14.2					1	14.2	4.7
SSW	14.2						1	14.2	1.5
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	28.4	28.4	28.5	14.2			7		5.8

300 METER LEVEL WINDS AFTERNOON MAY.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	12.5	12.5					2	25.0	1.9
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		12.5					1	12.5	4.5
S			12.5				1	12.5	6.3
SSW							0	0.0	
SW	12.5						1	12.5	.8
WSW							0	0.0	
W							0	0.0	
WNW				12.5			1	12.5	10.0
NW	12.5						1	12.5	2.4
NNW	12.5						1	12.5	2.7
CALM							0	0.0	
COL. TOTALS	50.0	25.0	12.5	12.5			8		3.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			14.2	14.2			2	28.4	8.4
NE	14.2						1	14.2	1.0
ENE	14.2						1	14.2	1.4
E							0	0.0	
ESE							0	0.0	
SE		14.2					1	14.2	4.7
SSE							0	0.0	
S							0	0.0	
SSW		14.2					1	14.2	3.5
SW							0	0.0	
WSW							0	0.0	
W	14.2						1	14.2	2.5
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	42.6	28.4	14.2	14.2			7		4.2

500 METER LEVEL WINDS AFTERNOON MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		12.5					1	12.5	3.7
NE	12.5						1	12.5	1.3
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE	12.5	12.5					2	25.0	2.8
S			12.5				1	12.5	8.6
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W	12.5						1	12.5	.6
WNW		12.5					1	12.5	5.9
NW		12.5					1	12.5	3.0
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	37.5	50.0	12.5				8		3.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	14.2						1	14.2	2.9
NE		14.2					1	14.2	3.9
ENE							0	0.0	
E	28.5						2	28.5	1.6
ESE							0	0.0	
SE	14.2						1	14.2	1.7
SSE		14.2					1	14.2	5.2
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW	14.2						1	14.2	1.4
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	71.1	28.4					7		2.6

750 METER LEVEL WINDS AFTERNOON MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	14.2						1	14.2	.5
E	14.2						1	14.2	.7
ESE							0	0.0	
SE		14.2					1	14.2	5.3
SSE	14.2	14.2					2	28.4	2.4
S							0	0.0	
SSW		14.2					1	14.2	3.3
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW		14.2					1	14.2	3.0
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	42.6	56.8					7		2.5

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                FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1000 METER LEVEL WINDS MORNING          MAY.1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW   SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

       N                                              0      0.0
     NNE                                              0      0.0
      NE    14.2  28.5                                3     42.7    3.3
     ENE                                              0      0.0
       E          14.2                                1     14.2    3.6
     ESE                                              0      0.0
      SE                                              0      0.0
     SSE          14.2                                1     14.2    5.1
       S                                              0      0.0
     SSW    14.2                                      1     14.2    2.9
      SW                                              0      0.0
     WSW          14.2                                1     14.2    3.0
       W                                              0      0.0
     WNW                                              0      0.0
      NW                                              0      0.0
     NNW                                              0      0.0

    CALM                                              0      0.0

COL. TOTALS 28.4  71.1                                7             3.5
1000 METER LEVEL WINDS AFTERNOON          MAY.1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW   SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

       N                                              0      0.0
     NNE                                              0      0.0
      NE                                              0      0.0
     ENE          14.2                                1     14.2    3.7
       E                                              0      0.0
     ESE                                              0      0.0
      SE          28.5                                2     28.5    4.7
     SSE    28.5                                      2     28.5    2.8
       S                                              0      0.0
     SSW                                              0      0.0
      SW                                              0      0.0
     WSW                                              0      0.0
       W                                              0      0.0
     WNW                                              0      0.0
      NW          28.5                                2     28.5    3.6
     NNW                                              0      0.0

    CALM                                              0      0.0

COL. TOTALS 28.5  71.2                                7             3.7
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                FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
 LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1500 METER LEVEL WINDS MORNING          MAY.1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW   SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

       N                                              0      0.0
     NNE                                              0      0.0
      NE                                              0      0.0
     ENE          14.2                                1     14.2    4.7
       E    14.2  14.2                                2     28.4    2.6
     ESE    14.2                                      1     14.2    2.9
      SE                                              0      0.0
     SSE                                              0      0.0
       S                                              0      0.0
     SSW                14.2                          1     14.2    7.2
      SW    14.2                                      1     14.2    2.9
     WSW                                              0      0.0
       W          14.2                                1     14.2    4.2
     WNW                                              0      0.0
      NW                                              0      0.0
     NNW                                              0      0.0

    CALM                                              0      0.0

COL. TOTALS 42.6  42.6  14.2                          7             3.8
1500 METER LEVEL WINDS AFTERNOON          MAY.1980
 DIRECTION  ********* WIND SPEEDS METERS/SECOND *************************
            00.1  03.0  06.0  10.0  16.0  GREATER    ROW   SUMMARY
             TO    TO    TO    TO    TO    THAN    TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0    COUNT  PERCENT  SPEED

       N                                              0      0.0
     NNE                                              0      0.0
      NE                                              0      0.0
     ENE                                              0      0.0
       E                                              0      0.0
     ESE          16.6  16.6                          2     33.2    5.4
      SE          33.3  16.6                          3     49.9    5.8
     SSE                                              0      0.0
       S                                              0      0.0
     SSW                                              0      0.0
      SW                                              0      0.0
     WSW                                              0      0.0
       W          16.6                                1     16.6    3.6
     WNW                                              0      0.0
      NW                                              0      0.0
     NNW                                              0      0.0

    CALM                                              0      0.0

COL. TOTALS       66.5  33.2                          6             5.3
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2000 METER LEVEL WINDS MORNING MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		14.2					1	14.2	3.9
ENE	14.2	14.2					2	28.4	3.3
E							0	0.0	
ESE		14.2					1	14.2	3.6
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW				14.2			1	14.2	12.2
SW	14.2	14.2					2	28.4	3.5
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	28.4	56.8		14.2			7		4.7

2000 METER LEVEL WINDS AFTERNOON MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	25.0						1	25.0	2.9
E							0	0.0	
ESE							0	0.0	
SE		25.0	25.0				2	50.0	6.3
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW			25.0				1	25.0	6.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	25.0	25.0	50.0				4		5.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2500 METER LEVEL WINDS MORNING MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

2500 METER LEVEL WINDS AFTERNOON MAY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					*************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING JUNE,1980

DIRECTION	WIND SPEEDS METERS/SECOND						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	30.0						3	30.0	1.5
NE		10.0					1	10.0	4.0
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW	20.0						2	20.0	1.8
SW	20.0						2	20.0	1.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	20.0						2	20.0	2.3
CALM							0	0.0	
COL. TOTALS	90.0	10.0					10		2.0

SURFACE WINDS AFTERNOON JUNE,1980

DIRECTION	WIND SPEEDS METERS/SECOND						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		10.0					1	10.0	4.7
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	30.0						3	30.0	2.3
SSE		10.0					1	10.0	3.8
S							0	0.0	
SSW	10.0						1	10.0	2.2
SW		10.0					1	10.0	3.1
WSW							0	0.0	
W	10.0	10.0					2	20.0	2.5
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							1	10.0	
COL. TOTALS	50.0	40.0					10		2.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING JUNE,1980

DIRECTION	WIND SPEEDS METERS/SECOND						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N		10.0					1	10.0	4.7
NNE			20.0				2	20.0	8.3
NE				10.0			1	10.0	14.1
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW			20.0				2	20.0	6.8
SW		10.0					1	10.0	3.1
WSW		10.0					1	10.0	5.7
W							0	0.0	
WNW							0	0.0	
NW	10.0						1	10.0	2.9
NNW	10.0						1	10.0	2.7
CALM							0	0.0	
COL. TOTALS	20.0	30.0	40.0	10.0			10		6.3

100 METER LEVEL WINDS AFTERNOON JUNE,1980

DIRECTION	WIND SPEEDS METERS/SECOND						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	10.0						1	10.0	2.7
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	20.0			10.0			3	30.0	6.7
SSE		10.0	10.0				2	20.0	5.1
S							0	0.0	
SSW							0	0.0	
SW				10.0			1	10.0	10.8
WSW							0	0.0	
W		10.0					1	10.0	5.0
WNW							0	0.0	
NW	10.0						1	10.0	2.5
NNW							0	0.0	
CALM							1	10.0	
COL. TOTALS	40.0	20.0	10.0	20.0			10		5.1

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                    FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

  LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

  200 METER LEVEL WINDS MORNING          JUNE.1980

   DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
                00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
                 TO     TO     TO     TO     TO    THAN      TOTAL   TOTAL  AVERAGE
                02.9   05.9   09.9   15.9   25.0   25.0      COUNT  PERCENT  SPEED

          N            10.0                                    1     10.0      4.1
        NNE                   20.0   10.0                      3     30.0      8.5
         NE                                                    0      0.0
        ENE                                                    0      0.0
          E                                                    0      0.0
        ESE                                                    0      0.0
         SE                   10.0                             1     10.0      6.1
        SSE                                                    0      0.0
          S                                                    0      0.0
        SSW                   10.0                             1     10.0      7.1
         SW     10.0                 10.0                      2     20.0      8.3
        WSW                                                    0      0.0
          W                                                    0      0.0
        WNW     10.0                                           1     10.0       .5
         NW     10.0                                           1     10.0      1.2
        NNW                                                    0      0.0

       CALM                                                    0      0.0

  COL. TOTALS   30.0   10.0   40.0   20.0                     10               6.1

  200 METER LEVEL WINDS AFTERNOON        JUNE.1980

   DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
                00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
                 TO     TO     TO     TO     TO    THAN      TOTAL   TOTAL  AVERAGE
                02.9   05.9   09.9   15.9   25.0   25.0      COUNT  PERCENT  SPEED

          N                                                    0      0.0
        NNE            10.0                                    1     10.0      5.3
         NE                                                    0      0.0
        ENE                                                    0      0.0
          E                                                    0      0.0
        ESE     10.0                                           1     10.0       .5
         SE     10.0          10.0                             2     20.0      6.0
        SSE            10.0   10.0                             2     20.0      6.4
          S                                                    0      0.0
        SSW                          10.0                      1     10.0     10.3
         SW                                                    0      0.0
        WSW                                                    0      0.0
          W                   10.0                             1     10.0      9.8
        WNW                                                    0      0.0
         NW     20.0                                           2     20.0      2.0
        NNW                                                    0      0.0

       CALM                                                    0      0.0

  COL. TOTALS   40.0   20.0   30.0   10.0                     10               5.4
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                    FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

  LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

  300 METER LEVEL WINDS MORNING          JUNE.1980

   DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
                00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
                 TO     TO     TO     TO     TO    THAN      TOTAL   TOTAL  AVERAGE
                02.9   05.9   09.9   15.9   25.0   25.0      COUNT  PERCENT  SPEED

          N                                                    0      0.0
        NNE                   10.0   10.0                      2     20.0      8.7
         NE     10.0          10.0                             2     20.0      3.7
        ENE                                                    0      0.0
          E     10.0                                           1     10.0      1.1
        ESE                                                    0      0.0
         SE                   10.0                             1     10.0      9.6
        SSE                                                    0      0.0
          S     10.0                                           1     10.0      1.0
        SSW            10.0                                    1     10.0      5.7
         SW            10.0          10.0                      2     20.0      7.3
        WSW                                                    0      0.0
          W                                                    0      0.0
        WNW                                                    0      0.0
         NW                                                    0      0.0
        NNW                                                    0      0.0

       CALM                                                    0      0.0

  COL. TOTALS   30.0   20.0   30.0   20.0                     10               5.7

  300 METER LEVEL WINDS AFTERNOON        JUNE.1980

   DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
                00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
                 TO     TO     TO     TO     TO    THAN      TOTAL   TOTAL  AVERAGE
                02.9   05.9   09.9   15.9   25.0   25.0      COUNT  PERCENT  SPEED

          N                                                    0      0.0
        NNE                                                    0      0.0
         NE                   10.0                             1     10.0      8.3
        ENE                                                    0      0.0
          E     10.0                                           1     10.0      2.8
        ESE                                                    0      0.0
         SE                                                    0      0.0
        SSE            30.0                                    3     30.0      4.4
          S     10.0                                           1     10.0      1.9
        SSW                                                    0      0.0
         SW                          10.0                      1     10.0     11.9
        WSW                                                    0      0.0
          W                          10.0                      1     10.0     11.8
        WNW     20.0                                           2     20.0      1.9
         NW                                                    0      0.0
        NNW                                                    0      0.0

       CALM                                                    0      0.0

  COL. TOTALS   40.0   30.0   10.0   20.0                     10               5.3
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
500 METER LEVEL WINDS MORNING          JUNE.1980
DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER       ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N                                               0      0.0
    NNE           10.0                                1     10.0      5.0
     NE           10.0                                1     10.0      5.1
    ENE                                               0      0.0
      E                                               0      0.0
    ESE                                               0      0.0
     SE           10.0                                1     10.0      5.0
    SSE                                               0      0.0
      S           20.0                                2     20.0      4.5
    SSW                 10.0                          1     10.0      7.2
     SW     10.0  10.0  10.0                          3     30.0      4.9
    WSW                                               0      0.0
      W                                               0      0.0
    WNW                                               0      0.0
     NW     10.0                                      1     10.0       .6
    NNW                                               0      0.0

   CALM                                               0      0.0

OL. TOTALS  20.0  60.0  20.0                         10               4.6
500 METER LEVEL WINDS AFTERNOON        JUNE.1980
DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER       ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N                                               0      0.0
    NNE                                               0      0.0
     NE                 10.0                          1     10.0      6.2
    ENE                                               0      0.0
      E           10.0                                1     10.0      3.1
    ESE                                               0      0.0
     SE                                               0      0.0
    SSE     10.0  10.0  20.0                          4     40.0      4.5
      S                                               0      0.0
    SSW                                               0      0.0
     SW                 10.0                          1     10.0      9.0
    WSW                                               0      0.0
      W                       10.0                    1     10.0     10.1
    WNW                 10.0                          1     10.0      6.7
     NW     10.0                                      1     10.0       .8
    NNW                                               0      0.0

   CALM                                               0      0.0

OL. TOTALS  20.0  20.0  50.0  10.0                   10               5.3
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
750 METER LEVEL WINDS MORNING          JUNE.1980
DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER       ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N                                               0      0.0
    NNE           10.0                                1     10.0      4.2
     NE                                               0      0.0
    ENE           10.0                                1     10.0      3.0
      E                                               0      0.0
    ESE                                               0      0.0
     SE           10.0                                1     10.0      5.1
    SSE           10.0                                1     10.0      4.2
      S     10.0  10.0                                2     20.0      3.1
    SSW           10.0                                1     10.0      5.0
     SW           10.0                                1     10.0      5.8
    WSW           10.0                                1     10.0      5.0
      W                                               0      0.0
    WNW                                               0      0.0
     NW     10.0                                      1     10.0      1.1
    NNW                                               0      0.0

   CALM                                               0      0.0

COL. TOTALS 20.0  80.0                               10               3.9
750 METER LEVEL WINDS AFTERNOON        JUNE.1980
DIRECTION  ********* WIND SPEEDS METERS/SECOND ***************************
            00.1  03.0  06.0  10.0  16.0  GREATER       ROW  SUMMARY
             TO    TO    TO    TO    TO    THAN     TOTAL   TOTAL  AVERAGE
            02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT  SPEED

      N                                               0      0.0
    NNE                                               0      0.0
     NE                 10.0                          1     10.0      7.2
    ENE                                               0      0.0
      E     10.0                                      1     10.0      1.8
    ESE                                               0      0.0
     SE           10.0                                1     10.0      3.0
    SSE           20.0                                2     20.0      3.8
      S           20.0                                2     20.0      4.6
    SSW     10.0        10.0                          2     20.0      4.5
     SW                                               0      0.0
    WSW                                               0      0.0
      W                 10.0                          1     10.0      7.3
    WNW                                               0      0.0
     NW                                               0      0.0
    NNW                                               0      0.0

   CALM                                               0      0.0

COL. TOTALS 20.0  50.0  30.0                         10               4.5
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                FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1000 METER LEVEL WINDS MORNING          JUNE.1980
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
                00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
                 TO     TO     TO     TO     TO    THAN     TOTAL   TOTAL   AVERAGE
                02.9   05.9   09.9   15.9   25.0    25.0     COUNT  PERCENT   SPEED

         N                                                     0      0.0
       NNE                                                     0      0.0
        NE             10.0                                    1     10.0      4.1
       ENE                                                     0      0.0
         E                                                     0      0.0
       ESE             10.0                                    1     10.0      4.3
        SE      10.0                                           1     10.0      1.2
       SSE             20.0                                    2     20.0      5.3
         S                                                     0      0.0
       SSW                                                     0      0.0
        SW                    10.0                             1     10.0      6.4
       WSW      10.0                                           1     10.0      2.0
         W      10.0   10.0                                    2     20.0      2.6
       WNW             10.0                                    1     10.0      5.2
        NW                                                     0      0.0
       NNW                                                     0      0.0

      CALM                                                     0      0.0

COL. TOTALS     30.0   60.0   10.0                            10               3.9
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1000 METER LEVEL WINDS AFTERNOON        JUNE.1980
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
                00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
                 TO     TO     TO     TO     TO    THAN     TOTAL   TOTAL   AVERAGE
                02.9   05.9   09.9   15.9   25.0    25.0     COUNT  PERCENT   SPEED

         N                                                     0      0.0
       NNE                                                     0      0.0
        NE                    10.0                             1     10.0      6.5
       ENE      10.0                                           1     10.0      1.8
         E                                                     0      0.0
       ESE      10.0                                           1     10.0      2.4
        SE                                                     0      0.0
       SSE                    10.0                             1     10.0      6.4
         S      10.0                                           1     10.0      1.7
       SSW      10.0   10.0   10.0                             3     30.0      4.4
        SW                                                     0      0.0
       WSW                    10.0                             1     10.0      7.2
         W                    10.0                             1     10.0      9.9
       WNW                                                     0      0.0
        NW                                                     0      0.0
       NNW                                                     0      0.0

      CALM                                                     0      0.0

COL. TOTALS     40.0   10.0   50.0                            10               4.9
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                FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
1500 METER LEVEL WINDS MORNING          JUNE.1960
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
                00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
                 TO     TO     TO     TO     TO    THAN     TOTAL   TOTAL   AVERAGE
                02.9   05.9   09.9   15.9   25.0    25.0     COUNT  PERCENT   SPEED

         N                                                     0      0.0
       NNE                                                     0      0.0
        NE                                                     0      0.0
       ENE      10.0                                           1     10.0      2.9
         E                                                     0      0.0
       ESE                                                     0      0.0
        SE             10.0   10.0                             2     20.0      6.0
       SSE                                                     0      0.0
         S                    10.0                             1     10.0      6.2
       SSW                                                     0      0.0
        SW      10.0                                           1     10.0      2.5
       WSW                    10.0                             1     10.0      6.5
         W      10.0   20.0                                    3     30.0      4.7
       WNW                                                     0      0.0
        NW             10.0                                    1     10.0      4.5
       NNW                                                     0      0.0

      CALM                                                     0      0.0

COL. TOTALS     30.0   40.0   30.0                            10               4.9
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1500 METER LEVEL WINDS AFTERNOON        JUNE.1980
  DIRECTION   ********* WIND SPEEDS METERS/SECOND **************************
                00.1   03.0   06.0   10.0   16.0  GREATER      ROW   SUMMARY
                 TO     TO     TO     TO     TO    THAN     TOTAL   TOTAL   AVERAGE
                02.9   05.9   09.9   15.9   25.0    25.0     COUNT  PERCENT   SPEED

         N                                                     0      0.0
       NNE                                                     0      0.0
        NE                                                     0      0.0
       ENE      11.1                                           1     11.1      2.0
         E             11.1                                    1     11.1      5.1
       ESE                                                     0      0.0
        SE                                                     0      0.0
       SSE                    11.1                             1     11.1      7.9
         S             11.1                                    1     11.1      4.4
       SSW                    11.1                             1     11.1      6.9
        SW                                                     0      0.0
       WSW             11.1   22.2   11.1                      4     44.4      8.0
         W                                                     0      0.0
       WNW                                                     0      0.0
        NW                                                     0      0.0
       NNW                                                     0      0.0

      CALM                                                     0      0.0

COL. TOTALS     11.1   33.3   44.4   11.1                      9               6.5
```

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

000 METER LEVEL WINDS MORNING JUNE,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND					********************			
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	12.5						1	12.5	1.7
E							0	0.0	
ESE							0	0.0	
SE			12.5				1	12.5	8.5
SSE							0	0.0	
S		12.5					1	12.5	5.2
SSW		12.5					1	12.5	5.5
SW			12.5				1	12.5	6.4
WSW			12.5				1	12.5	8.3
W				12.5			1	12.5	11.3
WNW				12.5			1	12.5	10.0
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
OL. TOTALS	12.5	25.0	37.5	25.0			8		7.1

000 METER LEVEL WINDS AFTERNOON JUNE,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND					********************			
N							0	0.0	
NNE							0	0.0	
NE	11.1						1	11.1	2.6
ENE							0	0.0	
E			11.1				1	11.1	7.9
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S		11.1	11.1				2	22.2	6.4
SSW							0	0.0	
SW		22.2	11.1				3	33.3	5.7
WSW			11.1				1	11.1	7.8
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW		11.1					1	11.1	5.8
CALM							0	0.0	
OL. TOTALS	11.1	44.4	44.4				9		6.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2500 METER LEVEL WINDS MORNING JUNE,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND					********************			
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

2500 METER LEVEL WINDS AFTERNOON JUNE,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
	********* WIND SPEEDS METERS/SECOND					********************			
N							0	0.0	
NNE							0	0.0	
NE	25.0						1	25.0	2.6
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW		25.0					1	25.0	5.1
SW			25.0	25.0			2	50.0	9.6
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	25.0	25.0	25.0	25.0			4		6.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					**************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	9.0						1	9.0	.1
E							0	0.0	
ESE							0	0.0	
SE	9.0						1	9.0	1.4
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW	9.0						1	9.0	.3
WSW							0	0.0	
W	18.1						2	18.1	.5
WNW	18.1						2	18.1	.5
NW							0	0.0	
NNW	9.0						1	9.0	1.1
CALM							3	27.0	
COL. TOTALS	72.2						11		.4

SURFACE WINDS AFTERNOON JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					**************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	9.0						1	9.0	1.7
SSE	36.3		9.0				5	45.3	2.5
S	27.2	9.0					4	36.2	2.7
SSW		9.0					1	9.0	3.4
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	72.5	18.0	9.0				11		2.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					**************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N	27.2	18.1					5	45.3	2.6
NNE							0	0.0	
NE	18.1						2	18.1	2.3
ENE							0	0.0	
E	9.0						1	9.0	.2
ESE							0	0.0	
SE							0	0.0	
SSE	9.0		9.0				2	18.0	5.2
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW		9.0					1	9.0	3.1
CALM							0	0.0	
COL. TOTALS	63.3	27.1	9.0				11		2.8

100 METER LEVEL WINDS AFTERNOON JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					**************************	ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		9.0					1	9.0	3.7
ENE							0	0.0	
E							0	0.0	
ESE		9.0	9.0				2	18.0	7.4
SE	9.0	27.2					4	36.2	3.2
SSE	9.0			9.0			2	18.0	7.8
S		9.0					1	9.0	4.9
SSW							0	0.0	
SW				9.0			1	9.0	10.4
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	18.0	54.2	9.0	18.0			11		5.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING JULY.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					********************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N	9.0		9.0				2	18.0	5.5
NNE	9.0	9.0					2	18.0	3.1
NE		9.0					1	9.0	3.3
ENE							0	0.0	
E							0	0.0	
ESE	9.0						1	9.0	2.0
SE							0	0.0	
SSE		18.1					2	18.1	3.5
S		9.0					1	9.0	5.9
SSW	9.0						1	9.0	1.1
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	9.0						1	9.0	.2
CALM							0	0.0	
COL. TOTALS	45.0	45.1	9.0				11		3.3

200 METER LEVEL WINDS AFTERNOON JULY.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					********************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE		9.0					1	9.0	5.6
SE		9.0	18.1				3	27.1	5.7
SSE	9.0	18.1	9.0				4	36.1	5.0
S			9.0				1	9.0	6.9
SSW							0	0.0	
SW				9.0			1	9.0	11.1
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							1	9.0	
COL. TOTALS	9.0	36.1	36.1	9.0			11		5.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING JULY.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					********************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE			18.1				2	18.1	6.9
NE	18.1						2	16.1	1.8
ENE	9.0						1	9.0	.4
E	9.0	9.0					2	18.0	2.2
ESE							0	0.0	
SE		9.0					1	9.0	5.6
SSE				16.1			2	16.1	12.3
S			9.0				1	9.0	6.5
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	36.1	18.0	27.1	18.1			11		5.3

300 METER LEVEL WINDS AFTERNOON JULY.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND					********************************			
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE			9.0				1	9.0	6.3
SE		9.0	18.1				3	27.1	7.0
SSE	9.0	18.1		18.1			5	45.2	7.5
S		9.0					1	9.0	4.5
SSW							0	0.0	
SW			9.0				1	9.0	7.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	9.0	36.1	36.1	18.1			11		7.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		9.0					1	9.0	5.6
NNE		9.0					1	9.0	3.4
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	9.0	18.1					3	27.1	3.1
SE		18.1					2	18.1	3.8
SSE				9.0			1	9.0	13.5
S		18.1					2	18.1	4.7
SSW							0	0.0	
SW			9.0				1	9.0	8.6
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	9.0	72.3	9.0	9.0			11		5.2

500 METER LEVEL WINDS AFTERNOON JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE				10.0			1	10.0	14.1
SE			20.0	10.0			3	30.0	8.9
SSE		20.0	10.0	10.0			4	40.0	7.0
S	10.0						1	10.0	1.6
SSW			10.0				1	10.0	6.6
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	10.0	20.0	40.0	30.0			10		7.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE		9.0	9.0				2	18.0	5.7
SE		9.0	18.1				3	27.1	6.1
SSE		9.0					1	9.0	4.2
S			9.0				1	9.0	7.3
SSW	9.0	9.0	9.0				3	27.0	4.8
SW				9.0			1	9.0	11.8
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	9.0	36.0	45.1	9.0			11		6.1

750 METER LEVEL WINDS AFTERNOON JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ********* 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE	10.0		10.0				2	20.0	4.9
SE				20.0			2	20.0	11.8
SSE	10.0						1	10.0	1.4
S	10.0		10.0				2	20.0	5.2
SSW	10.0		10.0				2	20.0	5.9
SW							0	0.0	
WSW	10.0						1	10.0	2.9
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	50.0		30.0	20.0			10		6.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING JULY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE			9.0				1	9.0	6.3
SE		9.0					1	9.0	5.4
SSE	9.0	9.0					2	18.0	3.5
S	9.0	9.0					2	18.0	2.6
SSW							0	0.0	
SW			9.0	9.0			2	18.0	9.1
WSW	9.0	9.0					2	18.0	3.1
W							0	0.0	
WNW		9.0					1	9.0	3.0
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	45.0	18.0	9.0			11		4.6

1000 METER LEVEL WINDS AFTERNOON JULY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E		11.1					1	11.1	4.6
ESE							0	0.0	
SE							0	0.0	
SSE		22.2					2	22.2	3.4
S		11.1					1	11.1	4.6
SSW		11.1		11.1			2	22.2	6.8
SW				11.1			1	11.1	12.7
WSW	11.1						1	11.1	1.5
W							0	0.0	
WNW							0	0.0	
NW				11.1			1	11.1	12.7
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	55.5		33.3			9		6.2

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING JULY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S			18.1				2	18.1	7.8
SSW	9.0						1	9.0	1.1
SW	9.0	9.0					2	18.0	4.2
WSW					9.0		1	9.0	16.7
W	9.0	27.2		9.0			5	45.2	5.6
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	27.0	36.2	18.1	9.0	9.0		11		6.3

1500 METER LEVEL WINDS AFTERNOON JULY,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		12.5					1	12.5	5.4
S		12.5					1	12.5	5.9
SSW			25.0				2	25.0	7.4
SW	12.5						1	12.5	.6
WSW		12.5					1	12.5	4.4
W					12.5		1	12.5	17.5
WNW							0	0.0	
NW		12.5					1	12.5	3.9
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	12.5	50.0	25.0		12.5		8		6.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2000 METER LEVEL WINDS MORNING JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	************* ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		12.5					1	12.5	3.2
S		12.5					1	12.5	4.8
SSW	12.5						1	12.5	1.8
SW							0	0.0	
WSW		25.0			12.5		3	37.5	8.7
W			12.5				1	12.5	6.4
WNW		12.5					1	12.5	3.7
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	12.5	62.5	12.5		12.5		8		5.7

000 METER LEVEL WINDS AFTERNOON JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	************* ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE		14.2					1	14.2	5.7
S							0	0.0	
SSW			28.5				2	28.5	7.5
SW			14.2				1	14.2	7.5
WSW		14.2		14.2			2	28.4	7.1
W							0	0.0	
WNW							0	0.0	
NW		14.2					1	14.2	3.8
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		42.6	42.7	14.2			7		6.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2500 METER LEVEL WINDS MORNING JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	************* ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

2500 METER LEVEL WINDS AFTERNOON JULY,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	************* ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	********** ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	18.1						2	18.1	1.4
NE	18.1						2	18.1	.7
ENE							0	0.0	
E							0	0.0	
ESE	9.0						1	9.0	.7
SE							0	0.0	
SSE	9.0						1	9.0	.7
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW	18.1						2	18.1	.6
NNW	18.1						2	18.1	.6
CALM							1	9.0	
COL. TOTALS	90.4						11		.7

SURFACE WINDS AFTERNOON AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	********** ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	33.3						2	33.3	2.2
SSE							0	0.0	
S	33.3						2	33.3	1.7
SSW							0	0.0	
SW							0	0.0	
WSW	16.6						1	16.6	.9
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	16.6						1	16.6	.4
CALM							0	0.0	
COL. TOTALS	99.8						6		1.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	********** ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		9.0	9.0				2	18.0	4.6
NNE			18.1				2	18.1	6.8
NE		9.0					1	9.0	4.5
ENE							0	0.0	
E	9.0						1	9.0	.5
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW	9.0						1	9.0	2.6
WSW							0	0.0	
W	9.0						1	9.0	1.3
WNW		9.0					1	9.0	5.9
NW	18.1						2	18.1	2.7
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	45.1	27.0	27.1				11		3.9

100 METER LEVEL WINDS AFTERNOON AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	********** ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	16.6						1	16.6	2.6
E			16.6				1	16.6	6.7
ESE							0	0.0	
SE							0	0.0	
SSE		16.6		16.6			2	33.2	7.1
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW	16.6						1	16.6	1.6
W							0	0.0	
WNW	16.6						1	16.6	.6
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	49.8	16.6	16.6	16.6			6		4.2

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

200 METER LEVEL WINDS MORNING AUGUST.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ******** 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVE SP
N							0	0.0	
NNE			18.1				2	18.1	6
NE		9.0					1	9.0	4
ENE							0	0.0	
E							0	0.0	
ESE	9.0						1	9.0	1.
SE	9.0						1	9.0	1.
SSE							0	0.0	
S	9.0						1	9.0	2.
SSW	9.0	9.0					2	18.0	4.
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW		18.1					2	18.1	5.
NNW		9.0					1	9.0	4.
CALM							0	0.0	
COL. TOTALS	36.0	45.1	16.1				11		4.

200 METER LEVEL WINDS AFTERNOON AUGUST.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ******** 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERA SPEE
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	16.6		16.6				2	33.2	4.
E							0	0.0	
ESE							0	0.0	
SE			16.6				1	16.6	6.
SSE							0	0.0	
S	16.6	16.6					2	33.2	3.
SSW							0	0.0	
SW	16.6						1	16.6	2.6
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	49.8	16.6	33.2				6		3.9

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

300 METER LEVEL WINDS MORNING AUGUST.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ******** 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE				9.0			1	9.0	15.2
NE		9.0	9.0				2	18.0	6.0
ENE		9.0					1	9.0	5.9
E							0	0.0	
ESE							0	0.0	
SE		9.0					1	9.0	3.5
SSE		9.0					1	9.0	4.2
S							0	0.0	
SSW		9.0					1	9.0	4.5
SW							0	0.0	
WSW	9.0						1	9.0	2.3
W							0	0.0	
WNW	9.0						1	9.0	2.0
NW	9.0						1	9.0	1.7
NNW			9.0				1	9.0	9.0
CALM							0	0.0	
COL. TOTALS	27.0	45.0	18.0	9.0			11		5.4

300 METER LEVEL WINDS AFTERNOON AUGUST.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND ******** 00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		16.6					1	16.6	4.0
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	16.6		16.6				2	33.2	5.0
SSE							0	0.0	
S			16.6				1	16.6	6.5
SSW							0	0.0	
SW							0	0.0	
WSW		16.6					1	16.6	3.0
W		16.6					1	16.6	4.3
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	16.6	49.8	33.2				6		4.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO – AIRPORT – FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING AUGUST,1980

DIRECTION	WIND SPEEDS METERS/SECOND						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N		9.0					1	9.0	4.9
NNE		9.0					1	9.0	3.3
NE			18.1				2	18.1	8.4
ENE		9.0					1	9.0	3.5
E		9.0					1	9.0	3.1
ESE							0	0.0	
SE	18.1						2	18.1	1.8
SSE		9.0					1	9.0	5.9
S							0	0.0	
SSW							0	0.0	
SW	9.0	9.0					2	18.0	2.6
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
OL. TOTALS	27.1	54.0	18.1				11		4.2

500 METER LEVEL WINDS AFTERNOON AUGUST,1980

DIRECTION	WIND SPEEDS METERS/SECOND						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE			20.0				1	20.0	6.5
ENE							0	0.0	
E							0	0.0	
ESE		20.0					1	20.0	4.3
SE							0	0.0	
SSE			20.0				1	20.0	6.4
S		20.0					1	20.0	3.7
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW	20.0						1	20.0	2.0
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
OL. TOTALS	20.0	40.0	40.0				5		4.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO – AIRPORT – FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING AUGUST,1980

DIRECTION	WIND SPEEDS METERS/SECOND						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	18.1						2	18.1	2.5
ENE							0	0.0	
E	9.0						1	9.0	2.6
ESE		9.0					1	9.0	5.5
SE		18.1					2	18.1	3.9
SSE			9.0				1	9.0	6.7
S		9.0					1	9.0	4.8
SSW		9.0					1	9.0	3.3
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW		9.0					1	9.0	3.7
NW							0	0.0	
NNW	9.0						1	9.0	1.8
CALM							0	0.0	
COL. TOTALS	36.1	54.1	9.0				11		3.7

750 METER LEVEL WINDS AFTERNOON AUGUST,1980

DIRECTION	WIND SPEEDS METERS/SECOND						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE		20.0	20.0				2	40.0	6.4
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S	20.0						1	20.0	1.1
SSW			20.0				1	20.0	6.4
SW	20.0						1	20.0	2.4
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	40.0	20.0	40.0				5		4.5

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	18.1	9.0					3	27.1	2.3
ENE							0	0.0	
E							0	0.0	
ESE		9.0					1	9.0	5.0
SE							0	0.0	
SSE	9.0	18.1					3	27.1	4.1
S		9.0					1	9.0	5.8
SSW							0	0.0	
SW	9.0						1	9.0	1.7
WSW							0	0.0	
W	18.1						2	18.1	2.0
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	54.2	45.1					11		3.2

1000 METER LEVEL WINDS AFTERNOON AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E		20.0					1	20.0	3.9
ESE	20.0						1	20.0	.4
SE							0	0.0	
SSE							0	0.0	
S				20.0			1	20.0	14.8
SSW		20.0	20.0				2	40.0	5.5
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	20.0	40.0	20.0	20.0			5		6.0

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE		9.0					1	9.0	5.8
NE		9.0					1	9.0	3.3
ENE							0	0.0	
E							0	0.0	
ESE	9.0						1	9.0	2.6
SE		18.1	9.0				3	27.1	4.5
SSE							0	0.0	
S							0	0.0	
SSW			9.0				1	9.0	6.9
SW							0	0.0	
WSW		9.0	9.0				2	18.0	5.5
W							0	0.0	
WNW		9.0					1	9.0	5.3
NW	9.0						1	9.0	1.7
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	18.0	54.1	27.0				11		4.5

1500 METER LEVEL WINDS AFTERNOON AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********************								
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE		40.0					2	40.0	3.1
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE			20.0				1	20.0	7.9
SSE				20.0			1	20.0	10.5
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW			20.0				1	20.0	7.1
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS		40.0	40.0	20.0			5		6.3

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2000 METER LEVEL WINDS MORNING AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********							****** SUMMARY ******	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE	11.1						1	11.1	.7
NE							0	0.0	
ENE		11.1					1	11.1	5.1
E							0	0.0	
ESE							0	0.0	
SE		11.1					1	11.1	5.4
SSE							0	0.0	
S		11.1	11.1				2	22.2	6.0
SSW		11.1					1	11.1	5.8
SW							0	0.0	
WSW							0	0.0	
W		11.1			11.1		2	22.2	11.2
WNW		11.1					1	11.1	3.7
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
OL. TOTALS	11.1	66.6	11.1		11.1		9		6.1

000 METER LEVEL WINDS AFTERNOON AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********							****** SUMMARY ******	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	33.3			33.3			2	66.6	7.2
SSE							0	0.0	
S				33.3			1	33.3	14.7
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
OL. TOTALS	33.3			66.6			3		9.7

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2500 METER LEVEL WINDS MORNING AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********							****** SUMMARY ******	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

2500 METER LEVEL WINDS AFTERNOON AUGUST,1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********							****** SUMMARY ******	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

SURFACE WINDS MORNING SEPTEMBER.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N	11.1						2	11.1	1.6
NNE							0	0.0	
NE							0	0.0	
ENE	5.5						1	5.5	.7
E							0	0.0	
ESE	5.5						1	5.5	1.8
SE	5.5						1	5.5	.4
SSE	16.6						3	16.6	1.0
S	11.1						2	11.1	1.1
SSW	5.5						1	5.5	.2
SW	16.6						3	16.6	.9
WSW							0	0.0	
W							0	0.0	
WNW	5.5						1	5.5	.7
NW	5.5						1	5.5	.4
NNW	11.1						2	11.1	1.0
CALM							0	0.0	
OL. TOTALS	99.5						18		.9

SURFACE WINDS AFTERNOON SEPTEMBER.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N	11.1						1	11.1	.7
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE	11.1						1	11.1	.7
SSE	11.1						1	11.1	.9
S	55.5						5	55.5	.8
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW	11.1						1	11.1	1.1
CALM							0	0.0	
OL. TOTALS	99.9						9		.8

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

100 METER LEVEL WINDS MORNING SEPTEMBER.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N			5.5				1	5.5	7.0
NNE	5.5						1	5.5	.5
NE							0	0.0	
ENE		5.5					1	5.5	5.2
E							0	0.0	
ESE	11.1		5.5				3	16.6	3.0
SE			5.5	5.5			2	11.0	8.2
SSE	5.5						1	5.5	2.8
S							0	0.0	
SSW		5.5					1	5.5	5.4
SW							0	0.0	
WSW							0	0.0	
W		5.5					1	5.5	3.7
WNW	5.5	11.1	5.5				4	22.1	5.4
NW							0	0.0	
NNW	5.5	5.5	5.5				3	16.5	5.3
CALM							0	0.0	
COL. TOTALS	33.1	33.1	27.5	5.5			18		4.8

100 METER LEVEL WINDS AFTERNOON SEPTEMBER.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND *********						ROW	SUMMARY	
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	TOTAL COUNT	TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE		11.1					1	11.1	4.1
E	11.1						1	11.1	1.3
ESE							0	0.0	
SE		11.1					1	11.1	3.1
SSE	11.1						1	11.1	2.4
S							0	0.0	
SSW							0	0.0	
SW		11.1					1	11.1	3.4
WSW							0	0.0	
W	22.2	11.1					3	33.3	2.0
WNW	11.1						1	11.1	2.9
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	55.5	44.4					9		2.5

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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
200 METER LEVEL WINDS MORNING   SEPTEMBER,1980
 DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL    TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT   SPEED

         N          5.5   5.5                            2     11.0     6.6
       NNE                                               0      0.0
        NE                      5.5                      1      5.5    10.1
       ENE                                               0      0.0
         E    5.5                                        1      5.5     2.7
       ESE    5.5   5.5   5.5                            3     16.5     5.0
        SE    5.5        16.6                            4     22.1     5.3
       SSE                                               0      0.0
         S                                               0      0.0
       SSW    5.5   5.5                                  2     11.0     2.4
        SW                                               0      0.0
       WSW                5.5                            1      5.5     6.4
         W                                               0      0.0
       WNW          5.5                                  1      5.5     5.1
        NW          5.5   5.5                            2     11.0     6.6
       NNW    5.5                                        1      5.5      .9

      CALM                                               0      0.0

COL. TOTALS  27.5  27.5  38.6   5.5                     18              5.1

200 METER LEVEL WINDS AFTERNOON SEPTEMBER,1980
 DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL    TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT   SPEED

         N                                               0      0.0
       NNE                                               0      0.0
        NE                                               0      0.0
       ENE         11.1                                  1     11.1     3.3
         E                                               0      0.0
       ESE   22.2                                        2     22.2     2.4
        SE         11.1                                  1     11.1     3.0
       SSE         11.1                                  1     11.1     4.0
         S   11.1                                        1     11.1      .5
       SSW                                               0      0.0
        SW                                               0      0.0
       WSW                           11.1                1     11.1    17.0
         W                                               0      0.0
       WNW         11.1                                  1     11.1     3.2
        NW   11.1                                        1     11.1      .7
       NNW                                               0      0.0

      CALM                                               0      0.0

COL. TOTALS  44.4  44.4              11.1                9              4.0
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            FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)
LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
300 METER LEVEL WINDS MORNING   SEPTEMBER,1980
 DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL    TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT   SPEED

         N                                               0      0.0
       NNE         11.1                                  2     11.1     4.3
        NE                                               0      0.0
       ENE          5.5                                  1      5.5     4.6
         E    5.5   5.5                                  2     11.0     3.3
       ESE    5.5   5.5                                  2     11.0     2.2
        SE               22.2                            4     22.2     7.0
       SSE                5.5                            1      5.5     9.9
         S                                               0      0.0
       SSW          5.5                                  1      5.5     3.1
        SW    5.5                                        1      5.5     2.2
       WSW                                               0      0.0
         W                                               0      0.0
       WNW          5.5   5.5                            2     11.0     6.1
        NW                                               0      0.0
       NNW          5.5   5.5                            2     11.0     6.9

      CALM                                               0      0.0

COL. TOTALS  16.5  44.1  38.7                           18              5.2

300 METER LEVEL WINDS AFTERNOON SEPTEMBER,1980
 DIRECTION   ********* WIND SPEEDS METERS/SECOND *************************
             00.1  03.0  06.0  10.0  16.0  GREATER     ROW   SUMMARY
              TO    TO    TO    TO    TO    THAN     TOTAL    TOTAL  AVERAGE
             02.9  05.9  09.9  15.9  25.0   25.0     COUNT  PERCENT   SPEED

         N                                               0      0.0
       NNE                                               0      0.0
        NE                                               0      0.0
       ENE                                               0      0.0
         E   22.2  11.1                                  3     33.3     2.9
       ESE                                               0      0.0
        SE         11.1                                  1     11.1     3.9
       SSE         11.1                                  1     11.1     4.8
         S                                               0      0.0
       SSW                                               0      0.0
        SW                                               0      0.0
       WSW         11.1        11.1                      2     22.2     9.1
         W   11.1                                        1     11.1      .8
       WNW   11.1                                        1     11.1     1.8
        NW                                               0      0.0
       NNW                                               0      0.0

      CALM                                               0      0.0

COL. TOTALS  44.4  44.4        11.1                      9              4.2
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FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

500 METER LEVEL WINDS MORNING SEPTEMBER.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	********	********	********	********	********	********	********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N			5.5				1	5.5	8.0
NNE							0	0.0	
NE							0	0.0	
ENE	5.5	5.5					2	11.0	3.6
E		11.1					2	11.1	4.0
ESE			11.1				2	11.1	7.8
SE			11.1				2	11.1	8.6
SSE			5.5	5.5			2	11.0	11.1
S	5.5		5.5				2	11.0	4.9
SSW							0	0.0	
SW							0	0.0	
WSW	5.5						1	5.5	2.4
W							0	0.0	
WNW	5.5	5.5					2	11.0	3.8
NW							0	0.0	
NNW	11.1						2	11.1	1.9
CALM							0	0.0	
COL. TOTALS	33.1	22.1	38.7	5.5			18		5.6

500 METER LEVEL WINDS AFTERNOON SEPTEMBER.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	********	********	********	********	********	********	********	********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE			11.1	11.1			2	22.2	10.4
E		11.1					1	11.1	5.3
ESE	11.1						1	11.1	2.2
SE	11.1						1	11.1	2.6
SSE							0	0.0	
S							0	0.0	
SSW		11.1					1	11.1	5.6
SW							0	0.0	
WSW	22.2						2	22.2	2.0
W							0	0.0	
WNW	11.1						1	11.1	1.4
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
OL. TOTALS	55.5	22.2	11.1	11.1			9		4.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

750 METER LEVEL WINDS MORNING SEPTEMBER.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	********	********	********	********	********	********	********	********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		5.5					1	5.5	5.9
NNE	5.5						1	5.5	.9
NE	5.5						1	5.5	2.9
ENE		11.1					2	11.1	5.3
E							0	0.0	
ESE		5.5					1	5.5	4.2
SE	5.5		5.5				2	11.0	6.2
SSE		11.1					2	11.1	5.4
S		11.1	5.5				3	16.6	5.2
SSW							0	0.0	
SW	5.5						1	5.5	2.4
WSW							0	0.0	
W	5.5	5.5					2	11.0	2.5
WNW		5.5					1	5.5	4.4
NW							0	0.0	
NNW	5.5						1	5.5	1.2
CALM							0	0.0	
COL. TOTALS	33.0	55.3	11.0				18		4.2

750 METER LEVEL WINDS AFTERNOON SEPTEMBER.1980

DIRECTION	********* WIND SPEEDS METERS/SECOND	********	********	********	********	********	********	********	********
	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E		11.1					1	11.1	5.1
ESE			11.1				1	11.1	6.6
SE			11.1				1	11.1	6.7
SSE							0	0.0	
S							0	0.0	
SSW			11.1				1	11.1	7.6
SW	11.1		11.1				2	22.2	4.4
WSW							0	0.0	
W	11.1						1	11.1	1.3
WNW							0	0.0	
NW		11.1					1	11.1	3.3
NNW	11.1						1	11.1	2.0
CALM							0	0.0	
COL. TOTALS	33.3	22.2	44.4				9		4.6

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1000 METER LEVEL WINDS MORNING SEPTEMBER,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N		6.2					1	6.2	5.8
NNE		6.2					1	6.2	5.4
NE							0	0.0	
ENE			6.2				1	6.2	6.8
E	6.2						1	6.2	.8
ESE			6.2				1	6.2	6.1
SE		6.2	6.2				2	12.4	5.0
SSE	6.2						1	6.2	1.6
S		6.2		12.5			3	18.7	9.0
SSW		6.2					1	6.2	4.3
SW							0	0.0	
WSW			6.2				1	6.2	6.3
W		6.2					1	6.2	3.9
WNW	6.2						1	6.2	.8
NW							0	0.0	
NNW		6.2					1	6.2	5.1
CALM							0	0.0	
COL. TOTALS	18.6	43.4	24.8	12.5			16		5.2

1000 METER LEVEL WINDS AFTERNOON SEPTEMBER,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE			11.1				1	11.1	9.3
E							0	0.0	
ESE	11.1						1	11.1	.7
SE		22.2					2	22.2	4.8
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW	11.1		11.1				2	22.2	5.8
WSW							0	0.0	
W		22.2					2	22.2	3.4
WNW							0	0.0	
NW			11.1				1	11.1	9.4
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	22.2	44.4	33.3				9		5.2

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

1500 METER LEVEL WINDS MORNING SEPTEMBER,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE	7.1						1	7.1	2.6
ENE							0	0.0	
E				7.1			1	7.1	12.8
ESE							0	0.0	
SE				7.1			1	7.1	10.1
SSE							0	0.0	
S	7.1	7.1	14.2				4	28.4	5.3
SSW							0	0.0	
SW		14.2		7.1			3	21.3	6.6
WSW		7.1					1	7.1	5.3
W			7.1				1	7.1	9.7
WNW	7.1						1	7.1	2.5
NW							0	0.0	
NNW				7.1			1	7.1	14.2
CALM							0	0.0	
COL. TOTALS	21.3	28.4	21.3	28.4			14		7.0

1500 METER LEVEL WINDS AFTERNOON SEPTEMBER,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N			11.1				1	11.1	8.0
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E		11.1					1	11.1	5.9
ESE							0	0.0	
SE	11.1						1	11.1	2.3
SSE		11.1					1	11.1	5.7
S		11.1					1	11.1	4.2
SSW					11.1		1	11.1	17.5
SW							0	0.0	
WSW							0	0.0	
W		11.1	11.1				2	22.2	5.2
WNW							0	0.0	
NW		11.1					1	11.1	3.5
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS	11.1	55.5	22.2		11.1		9		6.4

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2000 METER LEVEL WINDS MORNING SEPTEMBER,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE				14.2			1	14.2	10.9
SE			14.2				1	14.2	6.5
SSE	14.2						1	14.2	2.8
S	14.2						1	14.2	2.1
SSW							0	0.0	
SW							0	0.0	
WSW		14.2		14.2			2	28.4	8.0
W			14.2				1	14.2	7.8
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
OL. TOTALS	28.4	14.2	28.4	28.4			7		6.6

000 METER LEVEL WINDS AFTERNOON SEPTEMBER,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE	14.2						1	14.2	1.9
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE				14.2	14.2		2	28.4	16.7
S							0	0.0	
SSW			14.2				1	14.2	6.7
SW							0	0.0	
WSW				14.2			1	14.2	14.7
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW		28.5					2	28.5	4.3
CALM							0	0.0	
OL. TOTALS	14.2	28.5	14.2	28.4	14.2		7		9.3

FREQUENCY SUMMARY OF UPPER LEVEL WINDS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

2500 METER LEVEL WINDS MORNING SEPTEMBER,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

2500 METER LEVEL WINDS AFTERNOON SEPTEMBER,1980

DIRECTION	00.1 TO 02.9	03.0 TO 05.9	06.0 TO 09.9	10.0 TO 15.9	16.0 TO 25.0	GREATER THAN 25.0	ROW TOTAL COUNT	SUMMARY TOTAL PERCENT	AVERAGE SPEED
N							0	0.0	
NNE							0	0.0	
NE							0	0.0	
ENE							0	0.0	
E							0	0.0	
ESE							0	0.0	
SE							0	0.0	
SSE							0	0.0	
S							0	0.0	
SSW							0	0.0	
SW							0	0.0	
WSW							0	0.0	
W							0	0.0	
WNW							0	0.0	
NW							0	0.0	
NNW							0	0.0	
CALM							0	0.0	
COL. TOTALS							0		

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                 FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

    LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

                 MONTH OF         JULY 1978     MORNING

             ***************** INVERSION BASE HEIGHT (METERS) ****************
             SFC    001    101    251    501    751   1001   1501   2001   2501      >
THICKNESS            TO     TO     TO     TO     TO     TO     TO     TO     TO   THAN    TOTAL
 (METERS)           100    250    500    750   1000   1500   2000   2500   3000   3000

001-100      8.8           2.9    8.8    8.8    2.9    8.8                                 41.0

101-250      5.8           2.9    8.8    8.8    2.9    5.8    2.9    2.9                   40.8

251-500      8.8    2.9                                                                    11.7

501-750

TOTAL       23.4    2.9    5.8   17.6   17.6    5.8   14.6    2.9    2.9

 NO INVERSION                                                                               5.0

                                                        TOTAL NO. OF OCCURENCES            32

 INVERSION
   TYPE

   1         6.2                         6.2    3.1   12.5                                 28.0

   2         3.1           6.2    9.3    6.2    3.1    3.1    3.1    3.1                   37.2

   3         9.3    3.1           9.3    6.2                                               27.9

   4         6.2                                                                            6.2

   5

                 MONTH OF         JULY 1978     AFTERNOON

             ***************** INVERSION BASE HEIGHT (METERS) ****************
             SFC    001    101    251    501    751   1001   1501   2001   2501      >
THICKNESS            TO     TO     TO     TO     TO     TO     TO     TO     TO   THAN    TOTAL
 (METERS)           100    250    500    750   1000   1500   2000   2500   3000   3000

001-100             5.5    5.5   11.1           5.5   11.1           5.5                   44.2

101-250                                  5.5                         5.5                   11.0

251-500                                              5.5                                    5.5

501-750

TOTAL               5.5    5.5   11.1    5.5    5.5   16.6          11.0

 NO INVERSION                                                                              38.0

                                                        TOTAL NO. OF OCCURENCES            11

 INVERSION
   TYPE

   1                                                 9.0           9.0                   18.0

   2                       9.0                      18.1                                   27.1

   3                9.0          18.1    9.0    9.0                                        45.1

   4                                                               9.0                      9.0

   5
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                      FREQUENCY SUMMARY OF MIXING HEIGHTS

      LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

     MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR      JULY  1978

     MIXING HEIGHT         MORNING              AFTERNOON
       (METERS)          OCCURENCES            OCCURENCES

          0- 100              4                     0

        101- 250              3                     0

        251- 500              3                     1

        501- 750              1                     0

        751-1000              0                     4

       1001-1500              0                     2

           >1500              1                     3

           TOTAL             12                    10

     AVERAGE WIND SPEED
     THROUGH MIXED
     LAYER (M/SEC)          3.8                   4.7

     AVERAGE LAPSE RATE
     BELOW FIRST INVER.
       (DEG C /100M)     -01.62                -02.59
```

FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF AUGUST 1978 MORNING

	*************** INVERSION BASE HEIGHT (METERS) ***************											
THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TC 1000	1001 TC 1500	1501 TC 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100	6.4	6.4	3.2	12.9	16.1	3.2	6.4	3.2	3.2			61.0
101-250	9.6	3.2	3.2	3.2	3.2			3.2				25.6
251-500	9.6											9.6
501-750			3.2									3.2
TOTAL	25.6	9.6	9.6	16.1	19.3	3.2	6.4	6.4	3.2			
NO INVERSION												0.0
								TOTAL NO. OF OCCURENCES				31
INVERSION TYPE												
1			3.2	3.2	6.4		3.2	3.2				19.2
2	3.2			9.6		3.2	3.2					19.2
3	12.9	6.4	6.4	3.2	9.6			3.2				41.7
4	9.6	3.2			3.2				3.2			19.2
5												

MONTH OF AUGUST 1978 AFTERNOON

	*************** INVERSION BASE HEIGHT (METERS) ***************											
THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TC 1500	1501 TC 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100												
101-250								16.6	8.3			24.9
251-500												
501-750												
TOTAL								16.6	8.3			
NO INVERSION												75.0
								TOTAL NO. OF OCCURENCES				3
INVERSION TYPE												
1								33.3				33.3
2								33.3	33.3			66.6
3												
4												
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR AUGUST 1978

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	6	0
101- 250	1	0
251- 500	4	0
501- 750	0	2
751-1000	0	0
1001-1500	1	1
>1500	0	8
TOTAL	12	11
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	3.8	4.7
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-00.66	-01.18

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            FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)
   LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
               MONTH OF SEPTEMBER 1978     MORNING

              **************** INVERSION BASE HEIGHT (METERS) ***************
               SFC   001   101   251   501   751  1001  1501  2001  2501     >
THICKNESS             TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN   TOTAL
 (METERS)            100   250   500   750  1000  1500  2000  2500  3000  3000

001-100        4.3   8.6  13.0  13.0   8.6                     8.6                56.1
101-250       17.3                 4.3   4.3   4.3                                30.2
251-500        4.3         4.3                                                     8.6
501-750        4.3                                                                 4.3
TOTAL         30.2   8.6  17.3  17.3  12.9   4.3               8.6
 NO INVERSION                                                                      0.0
                                                TOTAL NO. OF OCCURENCES             23

 INVERSION
   TYPE
   1          13.0               4.3   4.3                     4.3                25.9
   2           4.3        17.3   4.3         4.3               4.3                34.5
   3           4.3   4.3         4.3   8.6                                        21.5
   4           8.6   4.3         4.3                                              17.2
   5

               MONTH OF SEPTEMBER 1978     AFTERNOON

              **************** INVERSION BASE HEIGHT (METERS) ***************
               SFC   001   101   251   501   751  1001  1501  2001  2501     >
THICKNESS             TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN   TOTAL
 (METERS)            100   250   500   750  1000  1500  2000  2500  3000  3000

001-100                   12.5  12.5        12.5                                  37.5
101-250                                     12.5                                  12.5
251-500
501-750
TOTAL                     12.5  12.5        25.0
 NO INVERSION                                                                     50.0
                                                TOTAL NO. OF OCCURENCES              4

 INVERSION
   TYPE
   1                                        50.0                                  50.0
   2                      25.0                                                    25.0
   3                            25.0                                              25.0
   4
   5
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                 FREQUENCY SUMMARY OF MIXING HEIGHTS
     LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
   MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR SEPTEMBER  1978

MIXING HEIGHT         MORNING            AFTERNOON
 (METERS)           OCCURENCES          OCCURENCES
    0- 100               4                   0
  101- 250               1                   0
  251- 500               1                   0
  501- 750               0                   0
  751-1000               1                   1
 1001-1500               0                   1
    >1500                2                   5
    TOTAL                9                   7

AVERAGE WIND SPEED
THROUGH MIXED
LAYER (M/SEC)           6.2                 8.0

AVERAGE LAPSE RATE
BELOW FIRST INVER.
   (DEG C /100M)     -00.80              -01.56
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FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF OCTOBER 1978 MORNING

	****************INVERSION BASE HEIGHT (METERS)***************											
THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100	8.8	2.2		6.6	11.1	6.6	2.2	4.4	2.2			44.1
101-250	4.4	4.4	2.2	6.6	4.4	4.4	2.2	6.6	6.6	2.2		44.0
251-500	8.8			2.2								11.0
501-750												
TOTAL	22.0	6.6	2.2	15.4	15.5	11.0	4.4	11.0	8.8	2.2		
NO INVERSION												0.0
								TOTAL NO. OF OCCURENCES				45
INVERSION TYPE												
1				2.2	6.6	4.4	2.2	2.2	2.2	2.2		22.0
2	2.2			8.8	4.4	4.4	2.2	6.6	2.2			30.8
3	8.8	2.2		4.4	2.2	2.2		2.2	4.4			26.4
4	11.1	4.4	2.2		2.2							19.9
5												

MONTH OF OCTOBER 1978 AFTERNOON

	****************INVERSION BASE HEIGHT (METERS)***************											
THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100					5.8	5.8	11.7		5.8	17.6		46.7
101-250				11.7		5.8		5.8	5.8			29.1
251-500								5.8	5.8			11.6
501-750												
TOTAL				11.7	5.8	11.6	11.7	11.6	17.4	17.6		
NO INVERSION												11.0
								TOTAL NO. OF OCCURENCES				15
INVERSION TYPE												
1									6.6	20.0		26.6
2				13.3	6.6	6.6	13.3	13.3	13.3			66.4
3						6.6						6.6
4												
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR OCTOBER 1978

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	9	0
101- 250	2	0
251- 500	1	0
501- 750	1	3
751-1000	0	1
1001-1500	0	3
>1500	0	1
TOTAL	13	8
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	3.3	4.9
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-01.12	-01.23

FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF NOVEMBER 1978 MORNING

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
				***************** INVERSION BASE HEIGHT (METERS) ***************								
001-100	2.9	2.9	5.8	2.9		2.9	2.9		2.9			23.2
101-250	8.8	2.9		5.8	2.9		5.8	2.9	5.8	5.8		40.7
251-500	2.9				8.8	2.9		8.8				23.4
501-750							2.9		2.9			5.8
TOTAL	14.6	5.8	5.8	8.7	11.7	5.8	11.6	11.7	11.6	5.8		
NO INVERSION												5.0
								TOTAL NO. OF OCCURENCES				32
INVERSION TYPE												
1			3.1	3.1	6.2		6.2	6.2	6.2	6.2		37.2
2		6.2		6.2	3.1			3.1	3.1			21.7
3	3.1		3.1		3.1	6.2	6.2	3.1	3.1			27.9
4	12.5											12.5
5												

MONTH OF NOVEMBER 1978 AFTERNOON

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
				***************** INVERSION BASE HEIGHT (METERS) ***************								
001-100				5.0	15.0	10.0						30.0
101-250		5.0		5.0		5.0	15.0	5.0	5.0			40.0
251-500								10.0	5.0	5.0		20.0
501-750												
TOTAL		5.0		10.0	15.0	15.0	15.0	15.0	10.0	5.0		
NO INVERSION												10.0
								TOTAL NO. OF OCCURENCES				18
INVERSION TYPE												
1		5.5			5.5	5.5	11.1	11.1	5.5			44.2
2					5.5	5.5	5.5	5.5				22.0
3				11.1	5.5				5.5	5.5		27.6
4						5.5						5.5
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR NOVEMBER 1978

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	5	0
101- 250	1	0
251- 500	1	2
501- 750	1	0
751-1000	1	1
1001-1500	1	1
>1500	2	4
TOTAL	12	8
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	4.6	4.8
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-00.71	-01.35

FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF DECEMBER 1978 MORNING

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100	15.7		10.5	10.5	5.2	10.5	5.2	10.5	5.2			73.3
101-250	10.5			5.2								15.7
251-500							5.2					5.2
501-750												
TOTAL	26.2		10.5	15.7	5.2	10.5	10.4	10.5	5.2			
NO INVERSION												5.0
								TOTAL NO. OF OCCURENCES				18
INVERSION TYPE												
1			5.5	5.5		5.5	5.5	5.5				27.5
2	5.5			5.5		5.5	5.5	5.5				27.5
3			5.5		5.5							11.0
4	16.6			5.5								22.1
5	5.5								5.5			11.0

MONTH OF DECEMBER 1978 AFTERNOON

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100		15.3					7.6		7.6			30.5
101-250			15.3	7.6		7.6	7.6					38.1
251-500						7.6						7.6
501-750												
TOTAL		15.3	15.3	7.6		15.2	15.2		7.6			
NO INVERSION												23.0
								TOTAL NO. OF OCCURENCES				10
INVERSION TYPE												
1						10.0			10.0			20.0
2			20.0				10.0					30.0
3				10.0		10.0	10.0					30.0
4		20.0										20.0
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR DECEMBER 1978

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	4	0
101- 250	0	5
251- 500	0	0
501- 750	0	0
751-1000	1	0
1001-1500	1	0
>1500	2	2
TOTAL	8	7
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	4.4	4.7
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-00.95	-01.03

FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF JANUARY 1979 MORNING

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100	4.5		4.5	4.5		4.5	4.5					22.5
101-250	4.5		4.5	13.6	13.6		9.0		9.0			54.2
251-500	4.5	9.0					4.5	4.5				22.5
501-750												
TOTAL	13.5	9.0	9.0	18.1	13.6	4.5	18.0	4.5	9.0			
NO INVERSION												0.0
							TOTAL NO. OF OCCURENCES					22
INVERSION TYPE												
1				4.5		4.5	9.0		4.5			22.5
2		4.5	9.0	9.0	4.5		4.5		4.5			36.0
3	13.6	4.5					4.5	4.5				27.1
4				4.5	9.0							13.5
5												

MONTH OF JANUARY 1979 AFTERNOON

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100		4.1		4.1	8.3			8.3	4.1			28.9
101-250	16.6			20.8				12.5				49.9
251-500		8.3					4.1	4.1				16.5
501-750					4.1							4.1
TOTAL	16.6	12.4		24.9	12.4		4.1	24.9	4.1			
NO INVERSION												0.0
							TOTAL NO. OF OCCURENCES					24
INVERSION TYPE												
1	8.3			8.3								16.6
2	4.1	4.1		4.1				8.3	4.1			24.7
3	4.1	8.3		8.3	12.5		4.1	12.5				49.8
4				4.1				4.1				8.2
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR JANUARY 1979

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	2	0
101- 250	2	3
251- 500	3	3
501- 750	0	0
751-1000	0	0
1001-1500	0	0
>1500	0	0
TOTAL	7	6
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	3.1	2.0
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-00.85	-00.74

FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF FEBRUARY 1979 MORNING

THICKNESS (METERS)	***************** INVERSION BASE HEIGHT (METERS) SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000 ***************	TOTAL
001-100	17.3	13.0	13.0	17.3	4.3							64.9
101-250	4.3		4.3		4.3	8.6		8.6				30.1
251-500				4.3								4.3
501-750												
TOTAL	21.6	13.0	17.3	21.6	8.6	8.6		8.6				
NO INVERSION												0.0
							TOTAL NO. OF OCCURENCES					23
INVERSION TYPE												
1				4.3								4.3
2	8.6	4.3	4.3	8.6	4.3	4.3						34.4
3	13.0	8.6	8.6	8.6	4.3	4.3		8.6				56.0
4			4.3									4.3
5												

MONTH OF FEBRUARY 1979 AFTERNOON

THICKNESS (METERS)	***************** INVERSION BASE HEIGHT (METERS) SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000 ***************	TOTAL
001-100	6.2	6.2	12.5	6.2			12.5					43.6
101-250	16.7		6.2	6.2			6.2	6.2				43.5
251-500												
501-750												
TOTAL	24.9	6.2	18.7	12.4			18.7	6.2				
NO INVERSION												12.0
							TOTAL NO. OF OCCURENCES					14
INVERSION TYPE												
1	14.2		7.1				14.2					35.5
2	7.1						7.1	7.1				21.3
3	7.1		14.2	14.2								35.5
4		7.1										7.1
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR FEBRUARY 1979

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	0	0
101- 250	1	4
251- 500	6	2
501- 750	0	0
751-1000	0	0
1001-1500	0	0
>1500	2	1
TOTAL	9	7
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	4.9	5.2
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-01.16	-00.41

FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF MARCH 1979 MORNING

THICKNESS (METERS)	****** INVERSION BASE HEIGHT (METERS) ****** SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100	14.8		3.7	14.8		7.4		3.7		3.7		48.1
101-250	11.1	3.7		7.4	3.7			7.4	7.4			40.7
251-500	7.4											7.4
501-750												
TOTAL	33.3	3.7	3.7	22.2	3.7	7.4		11.1	7.4	3.7		
NO INVERSION												3.0
								TOTAL NO. OF OCCURENCES				26
INVERSION TYPE												
1				3.8	3.8			11.5	3.8			22.9
2			3.8	7.6		3.8						15.2
3	23.0	3.8		11.5		3.8			3.8	3.8		49.7
4	11.5											11.5
5												

MONTH OF MARCH 1979 AFTERNOON

THICKNESS (METERS)	****** INVERSION BASE HEIGHT (METERS) ****** SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100				13.3	6.6	6.6				6.6		33.1
101-250					6.6			20.0	6.6			33.2
251-500												
501-750												
TOTAL				13.3	13.2	6.6		20.0	6.6	6.6		
NO INVERSION												33.0
								TOTAL NO. OF OCCURENCES				10
INVERSION TYPE												
1					10.0			20.0				30.0
2					10.0	10.0		10.0				30.0
3				20.0					10.0	10.0		40.0
4												
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR MARCH 1979

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	4	0
101- 250	5	1
251- 500	1	1
501- 750	1	4
751-1000	0	1
1001-1500	0	0
>1500	0	3
TOTAL	11	10
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	4.2	4.2
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-01.60	-01.45

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                 FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

     LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

                  MONTH OF     APRIL 1979    MORNING

            *************** INVERSION BASE HEIGHT (METERS) **************
            SFC   001   101   251   501   751  1001  1501  2001  2501    >
THICKNESS          TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN   TOTAL
 (METERS)         100   250   500   750  1000  1500  2000  2500  3000  3000

001-100     4.1        12.5   8.3         4.1         4.1         4.1         37.2

101-250    20.8               12.5        4.1   4.1         4.1               45.6

251-500     8.3         4.1                                                   12.4

501-750

TOTAL      33.2        16.6  20.8         8.2   4.1   4.1   4.1   4.1

 NO INVERSION                                                                  4.0

                                             TOTAL NO. OF OCCURENCES           23

 INVERSION
   TYPE

   1                          8.6         4.3   4.3         4.3               21.5

   2        8.6        17.3   4.3         4.3         4.3                     38.8

   3       17.3               8.6                                 4.3         30.2

   4        8.6                                                                8.6

   5

                  MONTH OF     APRIL 1979    AFTERNOON

            *************** INVERSION BASE HEIGHT (METERS) **************
            SFC   001   101   251   501   751  1001  1501  2001  2501    >
THICKNESS          TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN   TOTAL
 (METERS)         100   250   500   750  1000  1500  2000  2500  3000  3000

001-100                      10.0  10.0              20.0                     40.0

101-250                      10.0                          10.0               20.0

251-500

501-750

TOTAL                        20.0  10.0              20.0  10.0

 NO INVERSION                                                                 40.0

                                             TOTAL NO. OF OCCURENCES            6

 INVERSION
   TYPE

   1                                                 16.6                     16.6

   2                         16.6  16.6              16.6  16.6               66.4

   3

   4                         16.6                                             16.6

   5
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              FREQUENCY SUMMARY OF MIXING HEIGHTS

   LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

  MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR      APRIL  1979

 MIXING HEIGHT        MORNING            AFTERNOON
  (METERS)          OCCURENCES           OCCURENCES

     0- 100              5                    0

   101- 250              1                    0

   251- 500              3                    1

   501- 750              0                    0

   751-1000              1                    1

  1001-1500              1                    2

      >1500              1                    4

      TOTAL             12                    8

 AVERAGE WIND SPEED
 THROUGH MIXED
 LAYER (M/SEC)         3.3                  5.2

 AVERAGE LAPSE RATE
 BELOW FIRST INVER.
   (DEG C /100M)    -00.74               -01.42
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                 FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)
     LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
                       MONTH OF        MAY 1979    MORNING

               **************** INVERSION BASE HEIGHT (METERS) ***************
               SFC   001   101   251   501   751  1001  1501  2001  2501   >
THICKNESS             TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN    TOTAL
 (METERS)            100   250   500   750  1000  1500  2000  2500  3000  3000

001-100    4.0  12.0   4.0         12.0   8.0   8.0                               48.0
101-250   20.0              12.0   4.0               4.0                          40.0
251-500    8.0                                                                     8.0
501-750
TOTAL     32.0  12.0   4.0  12.0  16.0   8.0   8.0   4.0
 NO INVERSION                                                                      4.0
                                             TOTAL NO. OF OCCURENCES               24
 INVERSION
   TYPE
   1             4.1               4.1         8.3   4.1                          20.6
   2             4.1   4.1   8.3   4.1   4.1                                      24.7
   3      25.0               4.1   8.3   4.1                                      41.5
   4       4.1   4.1                                                               8.2
   5       4.1                                                                     4.1
                       MONTH OF        MAY 1979    AFTERNOON

               **************** INVERSION BASE HEIGHT (METERS) ***************
               SFC   001   101   251   501   751  1001  1501  2001  2501   >
THICKNESS             TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN    TOTAL
 (METERS)            100   250   500   750  1000  1500  2000  2500  3000  3000
001-100
101-250                                         10.0                              10.0
251-500
501-750
TOTAL                                           10.0
 NO INVERSION                                                                     90.0
                                             TOTAL NO. OF OCCURENCES                1
 INVERSION
   TYPE
   1                                           100.0                             100.0
   2
   3
   4
   5
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                  FREQUENCY SUMMARY OF MIXING HEIGHTS
       LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
       MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR        MAY  1979
MIXING HEIGHT       MORNING            AFTERNOON
  (METERS)        OCCURENCES          OCCURENCES
    0- 100            7                    0
  101- 250            2                    0
  251- 500            1                    0
  501- 750            2                    0
  751-1000            0                    2
 1001-1500            0                    3
     >1500            1                    5
     TOTAL           13                   10

 AVERAGE WIND SPEED
 THROUGH MIXED
 LAYER (M/SEC)       3.0                  6.1

 AVERAGE LAPSE RATE
 BELOW FIRST INVER.
    (DEG C /100M)  -01.02               -01.14
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FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF JUNE 1979 MORNING

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100				4.3	8.6	4.3	4.3	4.3				25.8
101-250	26.0	4.3		17.3		4.3	4.3					56.2
251-500	17.3											17.3
501-750												
TOTAL	43.3	4.3		21.6	8.6	8.6	8.6	4.3				
NO INVERSION												0.0

TOTAL NO. OF OCCURENCES 23

INVERSION TYPE	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
1				4.3		8.6	8.6					21.5
2	8.6			8.6	4.3			4.3				25.8
3	21.7	4.3		8.6	4.3							38.9
4	13.0											13.0
5												

MONTH OF JUNE 1979 AFTERNOON

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100											10.0	10.0
101-250										10.0		10.0
251-500												
501-750												
TOTAL										10.0	10.0	
NO INVERSION												80.0

TOTAL NO. OF OCCURENCES 2

INVERSION TYPE	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
1												
2												
3											50.0	50.0
4										50.0		50.0
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR JUNE 1979

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	6	0
101- 250	5	0
251- 500	1	0
501- 750	0	1
751-1000	0	1
1001-1500	1	1
>1500	0	7
TOTAL	13	10
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	2.2	6.4
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-00.47	-00.85

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR JULY 1979

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	7	0
101- 250	4	0
251- 500	0	1
501- 750	0	0
751-1000	0	1
1001-1500	0	2
>1500	1	8
TOTAL	12	12
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	3.5	5.2
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-01.07	-00.85

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR AUGUST 1979

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	8	0
101- 250	2	0
251- 500	1	1
501- 750	0	0
751-1000	0	0
1001-1500	1	2
>1500	0	8
TOTAL	12	11
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	3.3	5.5
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-01.33	-01.35

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               FREQUENCY SUMMARY OF MIXING HEIGHTS
     LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
  MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR SEPTEMBER  1979
MIXING HEIGHT       MORNING           AFTERNOON
 (METERS)          OCCURENCES         OCCURENCES
    0- 100            10                 0
  101- 250             5                 0
  251- 500             1                 0
  501- 750             0                 1
  751-1000             1                 0
 1001-1500             0                 0
    >1500              1                 9
    TOTAL             18                10

 AVERAGE WIND SPEED
 THROUGH MIXED
 LAYER (M/SEC)        4.4               4.8

 AVERAGE LAPSE RATE
 BELOW FIRST INVER.
   (DEG C /100M)   -02.52            -01.04
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               FREQUENCY SUMMARY OF MIXING HEIGHTS
     LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
  MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR   OCTOBER  1979
MIXING HEIGHT       MORNING           AFTERNOON
 (METERS)          OCCURENCES         OCCURENCES
    0- 100            12                 0
  101- 250             5                 0
  251- 500             0                 2
  501- 750             0                 0
  751-1000             0                 1
 1001-1500             0                 4
    >1500              2                 3
    TOTAL             19                10

 AVERAGE WIND SPEED
 THROUGH MIXED
 LAYER (M/SEC)        3.2               5.1

 AVERAGE LAPSE RATE
 BELOW FIRST INVER.
   (DEG C /100M)   -03.86            -01.01
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FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF NOVEMBER 1979 MORNING

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100	2.7		2.7	5.4			8.1	2.7				21.6
101-250	5.4		5.4	5.4	2.7	5.4	16.2	10.8	5.4	2.7		59.4
251-500	2.7			2.7		5.4		2.7				13.5
501-750						2.7						2.7
TOTAL	10.8		8.1	13.5	2.7	13.5	24.3	16.2	5.4	2.7		
NO INVERSION												2.0

TOTAL NO. OF OCCURENCES 36

INVERSION TYPE	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
1			5.5	8.3	2.7		11.1	13.8	2.7	2.7		46.8
2			2.7	5.5		5.5	8.3					22.0
3	8.3					2.7			2.7			13.7
4	2.7					5.5	5.5	2.7				16.4
5												

MONTH OF NOVEMBER 1979 AFTERNOON

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100							9.0	9.0	9.0			27.0
101-250							9.0	27.2				36.2
251-500				9.0				9.0				18.0
501-750												
TOTAL				9.0			18.0	45.2	9.0			
NO INVERSION												18.0

TOTAL NO. OF OCCURENCES 9

INVERSION TYPE	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
1							22.2	11.1				33.3
2								33.3	11.1			44.4
3				11.1								11.1
4								11.1				11.1
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR NOVEMBER 1979

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	4	0
101- 250	0	0
251- 500	4	1
501- 750	1	1
751-1000	3	2
1001-1500	1	2
>1500	1	1
TOTAL	14	7
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	2.3	3.2
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-00.64	-00.91

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              FREQUENCY SUMMARY OF MIXING HEIGHTS
   LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
  MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR  DECEMBER  1979
MIXING HEIGHT       MORNING           AFTERNOON
 (METERS)         OCCURENCES         OCCURENCES

    0- 100             2                  0
  101- 250             4                  1
  251- 500             1                  0
  501- 750             0                  1
  751-1000             0                  1
 1001-1500             1                  1
     >1500             2                  1
     TOTAL            10                  5

 AVERAGE WIND SPEED
 THROUGH MIXED
 LAYER (M/SEC)       4.4                6.0

 AVERAGE LAPSE RATE
 BELOW FIRST INVER.
    (DEG C /100M)  -00.00             -00.56
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FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF JANUARY 1980 MORNING

THICKNESS (METERS)	**************** INVERSION BASE HEIGHT (METERS) ***************											TOTAL
	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TC 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	
001-100	5.8				11.7		11.7					29.2
101-250	17.6	11.7		5.8		5.8	11.7					52.6
251-500	5.8			5.8					5.8			17.4
501-750												
TOTAL	29.2	11.7		11.6	11.7	5.8	23.4		5.8			
NO INVERSION												0.0
							TOTAL NO. OF OCCURENCES					17
INVERSION TYPE												
1							11.7					11.7
2	5.8						11.7		5.8			23.3
3	11.7	11.7		11.7	11.7	5.8						52.6
4	11.7											11.7
5												

MONTH OF JANUARY 1980 AFTERNOON

THICKNESS (METERS)	**************** INVERSION BASE HEIGHT (METERS) ***************											TOTAL
	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	
001-100	4.7	9.5		9.5	4.7	4.7		4.7	9.5			47.3
101-250	4.7			9.5	4.7		4.7	14.2				37.8
251-500												
501-750												
TOTAL	9.4	9.5		19.0	9.4	4.7	4.7	18.9	9.5			
NO INVERSION												14.0
							TOTAL NO. OF OCCURENCES					18
INVERSION TYPE												
1		5.5						11.1				16.6
2				5.5	5.5	5.5	5.5	5.5				27.5
3	5.5	5.5		11.1	5.5			5.5	11.1			44.2
4	5.5			5.5								11.0
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR JANUARY 1980

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	5	0
101- 250	1	1
251- 500	0	4
501- 750	0	2
751-1000	0	0
1001-1500	2	0
>1500	0	2
TOTAL	8	9
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	3.5	3.0
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-01.86	-00.72

FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF FEBRUARY 1980 MORNING

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
	***************** INVERSION BASE HEIGHT (METERS) ***************											
001-100	25.0				6.2		6.2	6.2				43.6
101-250	12.5		6.2	6.2	6.2							31.1
251-500	12.5			6.2			6.2					24.9
501-750												
TOTAL	50.0		6.2	12.4	12.4		12.4	6.2				
NO INVERSION												0.0
								TOTAL NO. OF OCCURENCES				16

INVERSION TYPE	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
1			6.2		6.2		6.2					18.6
2	12.5				6.2							18.7
3	18.7			12.5			6.2	6.2				43.6
4	18.7											18.7
5												

MONTH OF FEBRUARY 1980 AFTERNOON

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
	***************** INVERSION BASE HEIGHT (METERS) ***************											
001-100	11.7		5.8		5.8	11.7		11.7	5.8			52.5
101-250		5.8	11.7	5.8					5.8			29.1
251-500			5.8				5.8					11.6
501-750												
TOTAL	11.7	5.8	23.3	5.8	5.8	11.7	5.8	11.7	11.6			
NO INVERSION												5.0
								TOTAL NO. OF OCCURENCES				16

INVERSION TYPE	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
1			6.2			6.2		6.2				18.6
2	6.2		12.5	6.2	6.2			6.2				37.3
3	6.2	6.2				6.2			6.2			24.8
4			6.2				6.2		6.2			18.6
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR FEBRUARY 1980

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	2	0
101- 250	2	3
251- 500	3	3
501- 750	0	1
751-1000	0	1
1001-1500	1	0
>1500	0	1
TOTAL	8	9
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	3.3	2.5
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-00.00	-01.86

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                    FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)
      LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
                      MONTH OF     MARCH 1980    MORNING

             **************** INVERSION BASE HEIGHT (METERS) ***************
             SFC    001   101   251   501   751  1001  1501  2001  2501   >
THICKNESS            TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN     TOTAL
 (METERS)           100   250   500   750  1000  1500  2000  2500  3000  3000

001-100             5.0  10.0  15.0  10.0        5.0                             45.0
101-250    10.0          10.0   5.0   5.0   5.0                5.0               40.0
251-500
501-750
TOTAL      10.0     5.0  20.0  20.0  15.0   5.0  5.0           5.0
 NO INVERSION                                                                    15.0
                                               TOTAL NO. OF OCCURENCES             17

 INVERSION
   TYPE
   1        5.8          5.8  11.7  11.7                                         35.0
   2                    11.7   5.8   5.8   5.8                 5.8               34.9
   3        5.8     5.8  5.8   5.8               5.8                             29.0
   4
   5

                      MONTH OF     MARCH 1980    AFTERNOON

             **************** INVERSION BASE HEIGHT (METERS) ***************
             SFC    001   101   251   501   751  1001  1501  2001  2501   >
THICKNESS            TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN     TOTAL
 (METERS)           100   250   500   750  1000  1500  2000  2500  3000  3000
001-100                  8.3                                                      8.3
101-250
251-500                                                8.3                        8.3
501-750
TOTAL                    8.3                           8.3
 NO INVERSION                                                                    83.0
                                               TOTAL NO. OF OCCURENCES              2

 INVERSION
   TYPE
   1                    50.0                          50.0                      100.0
   2
   3
   4
   5
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                      FREQUENCY SUMMARY OF MIXING HEIGHTS
         LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
        MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR      MARCH  1980
      MIXING HEIGHT       MORNING               AFTERNOON
       (METERS)         OCCURENCES             OCCURENCES
         0- 100              1                      0
       101- 250              2                      0
       251- 500              2                      2
       501- 750              2                      0
       751-1000              0                      0
      1001-1500              1                      3
         >1500               3                      7
          TOTAL             11                     12

       AVERAGE WIND SPEED
       THROUGH MIXED
       LAYER (M/SEC)        5.7                    6.2

       AVERAGE LAPSE RATE
       BELOW FIRST INVER.
          (DEG C /100M)  -00.81                 -01.03
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FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF APRIL 1980 MORNING

	***************** INVERSION BASE HEIGHT (METERS) ***************											
THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100	5.5			11.1	5.5			5.5				27.6
101-250	16.6		11.1	5.5	11.1	5.5			11.1			60.9
251-500			5.5									5.5
501-750												
TOTAL	22.1		16.6	16.6	16.6	5.5		5.5	11.1			
NO INVERSION												5.0
TOTAL NO. OF OCCURENCES												17
INVERSION TYPE												
1					5.8	5.8			5.8			17.4
2			5.8	5.8	5.8				5.8			23.2
3	11.7		11.7	11.7	5.8			5.8				46.7
4	11.7											11.7
5												

MONTH OF APRIL 1980 AFTERNOON

	***************** INVERSION BASE HEIGHT (METERS) ***************											
THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100				16.6			8.3					24.9
101-250				8.3		8.3						16.6
251-500								8.3				8.3
501-750												
TOTAL				24.9		8.3	8.3	8.3				
NO INVERSION												50.0
TOTAL NO. OF OCCURENCES												6
INVERSION TYPE												
1				16.6		16.6						33.2
2				16.6				16.6				33.2
3				16.6			16.6					33.2
4												
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR APRIL 1980

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	3	0
101- 250	3	0
251- 500	1	0
501- 750	0	2
751-1000	1	0
1001-1500	0	2
>1500	1	5
TOTAL	9	9
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	6.6	8.0
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-00.58	-01.75

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              FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

      LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

                   MONTH OF        MAY 1980     MORNING

            ***************** INVERSION BASE HEIGHT (METERS) ***************
             SFC   001   101   251   501   751  1001  1501  2001  2501     >
THICKNESS           TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN   TOTAL
(METERS)           100   250   500   750  1000  1500  2000  2500  3000  3000

001-100     12.5               6.2  18.7                     6.2                43.6

101-250      6.2   6.2        12.5         6.2   6.2                            37.3

251-500     12.5         6.2                                                    18.7

501-750

TOTAL       31.2   6.2   6.2  18.7  18.7   6.2   6.2         6.2

NO INVERSION                                                                     0.0

                                                    TOTAL NO. OF OCCURENCES       16

 INVERSION
   TYPE

  1                                  6.2                                         6.2

  2                6.2   6.2   6.2  12.5   6.2               6.2                43.5

  3         31.2              12.5               6.2                            49.9

  4

  5

                   MONTH OF        MAY 1980     AFTERNOON

            ***************** INVERSION BASE HEIGHT (METERS) ***************
             SFC   001   101   251   501   751  1001  1501  2001  2501     >
THICKNESS           TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN   TOTAL
(METERS)           100   250   500   750  1000  1500  2000  2500  3000  3000

001-100                       11.1                    11.1                      22.2

101-250                 11.1  11.1  11.1              11.1                      44.4

251-500

501-750

TOTAL                   11.1  22.2  11.1              22.2

NO INVERSION                                                                    33.0

                                                    TOTAL NO. OF OCCURENCES        6

 INVERSION
   TYPE

  1                     16.6  16.6  16.6              16.6                      66.4

  2                                                   16.6                      16.6

  3                           16.6                                              16.6

  4

  5
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                 FREQUENCY SUMMARY OF MIXING HEIGHTS

  LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR        MAY  1980

MIXING HEIGHT        MORNING            AFTERNOON
  (METERS)          OCCURENCES          OCCURENCES

    0- 100              1                   0

  101- 250              3                   0

  251- 500              3                   0

  501- 750              0                   1

  751-1000              0                   0

 1001-1500              0                   1

     >1500              0                   6

     TOTAL              7                   8

AVERAGE WIND SPEED
THROUGH MIXED
LAYER (M/SEC)          5.1                 3.9

AVERAGE LAPSE RATE
BELOW FIRST INVER.
   (DEG C /100M)   -00.35              -01.39
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FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF JUNE 1980 MORNING

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
	*************** INVERSION BASE HEIGHT (METERS) ***************											
001-100	11.1	3.7	7.4	7.4	14.8	3.7		7.4				55.5
101-250		7.4	7.4	3.7	3.7			3.7				25.9
251-500	3.7	7.4	3.7	3.7								18.5
501-750												
TOTAL	14.8	18.5	18.5	14.8	18.5	3.7		11.1				
NO INVERSION												0.0
								TOTAL NO. OF OCCURENCES				27
INVERSION TYPE												
1				3.7	7.4							11.1
2	3.7		7.4	11.1	3.7			11.1				37.0
3	3.7	14.8	11.1		7.4	3.7						40.7
4	7.4	3.7										11.1
5												

MONTH OF JUNE 1980 AFTERNOON

THICKNESS (METERS)	SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
	*************** INVERSION BASE HEIGHT (METERS) ***************											
001-100		18.1	9.0					9.0				36.1
101-250							9.0					9.0
251-500						9.0						9.0
501-750												
TOTAL		18.1	9.0			9.0	9.0	9.0				
NO INVERSION												45.0
								TOTAL NO. OF OCCURENCES				6
INVERSION TYPE												
1						16.6						16.6
2		16.6	16.6				16.6					49.8
3								16.6				16.6
4												
5		16.6										16.6

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR JUNE 1980

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	4	0
101- 250	4	0
251- 500	1	1
501- 750	0	0
751-1000	1	1
1001-1500	0	0
>1500	0	8
TOTAL	10	10
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	5.1	5.4
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-01.58	-02.64

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                  FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

      LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

                       MONTH OF        JULY 1980     MORNING

             **************** INVERSION BASE HEIGHT (METERS) ***************
               SFC   001   101   251   501   751  1001  1501  2001  2501     >
THICKNESS             TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN   TOTAL
 (METERS)            100   250   500   750  1000  1500  2000  2500  3000  3000

001-100        4.7   7.1   9.5  14.2  14.2   7.1   4.7         2.3                63.8

101-250        4.7  11.9   4.7   9.5   2.3   2.3                                  35.4

251-500

501-750

TOTAL          9.4  19.0  14.2  23.7  16.5   9.4   4.7         2.3

 NO INVERSION                                                                      0.0

                                                       TOTAL NO. OF OCCURENCES      42

 INVERSION
  TYPE

  1                              2.3   2.3   2.3   2.3                             9.2

  2                  2.3         7.1   7.1   7.1   2.3                            25.9

  3                  9.5  11.9  11.9   4.7                     2.3                40.3

  4            9.5   7.1   2.3   2.3   2.3                                        23.5

  5

                       MONTH OF        JULY 1980     AFTERNOON

             **************** INVERSION BASE HEIGHT (METERS) ***************
               SFC   001   101   251   501   751  1001  1501  2001  2501     >
THICKNESS             TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN   TOTAL
 (METERS)            100   250   500   750  1000  1500  2000  2500  3000  3000

001-100              5.7   5.7   8.5  22.8  17.1  28.5   5.7   2.8                96.8

101-250

251-500

501-750

TOTAL                5.7   5.7   8.5  22.8  17.1  28.5   5.7   2.8

 NO INVERSION                                                                      2.0

                                                       TOTAL NO. OF OCCURENCES      34

 INVERSION
  TYPE

  1                              5.8  11.7   2.9   2.9   5.8   2.9                32.0

  2                  2.9         2.9   5.8   8.8  20.5                            40.9

  3                        5.8         5.8   5.8   5.8                            23.2

  4                  2.9                                                           2.9

  5
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                 FREQUENCY SUMMARY OF MIXING HEIGHTS

   LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

  MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR       JULY  1980

 MIXING HEIGHT        MORNING              AFTERNOON
  (METERS)          OCCURENCES            OCCURENCES

    0- 100               8                     0

  101- 250               3                     0

  251- 500               0                     0

  501- 750               0                     0

  751-1000               0                     1

 1001-1500               0                     1

     >1500               0                     8

     TOTAL              11                    10

AVERAGE WIND SPEED
THROUGH MIXED
LAYER (M/SEC)           2.3                   6.8

AVERAGE LAPSE RATE
BELOW FIRST INVER.
   (DEG C /100M)   -02.44                -02.79
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                  FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

      LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

                     MONTH OF     AUGUST 1980     MORNING

             **************** INVERSION BASE HEIGHT (METERS) ***************
             SFC   001   101   251   501   751  1001  1501  2001  2501     >
THICKNESS           TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN   TOTAL
 (METERS)          100   250   500   750  1000  1500  2000  2500  3000  3000

001-100      2.7   5.5   2.7  27.7   5.5   2.7   2.7   2.7   2.7                54.9

101-250     13.8   8.3         8.3   5.5         2.7   2.7                      41.3

251-500      2.7                                                                 2.7

501-750

TOTAL       19.2  13.8   2.7  36.0  11.0   2.7   5.4   5.4   2.7

 NO INVERSION                                                                    0.0

                                                     TOTAL NO. OF OCCURENCES      36

 INVERSION
   TYPE

   1               2.7        11.1   2.7         5.5   2.7                      24.7

   2                          16.6   5.5   2.7                                  24.8

   3        13.8   8.3   2.7   8.3   2.7               2.7   2.7                41.2

   4         5.5   2.7                                                           8.2

   5

                     MONTH OF     AUGUST 1980     AFTERNOON

             **************** INVERSION BASE HEIGHT (METERS) ***************
             SFC   001   101   251   501   751  1001  1501  2001  2501     >
THICKNESS           TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN   TOTAL
 (METERS)          100   250   500   750  1000  1500  2000  2500  3000  3000

001-100                        6.2  12.5        31.2  25.0                      74.9

101-250                       12.5         6.2                                  18.7

251-500

501-750

TOTAL                         18.7  12.5   6.2  31.2  25.0

 NO INVERSION                                                                    6.0

                                                     TOTAL NO. OF OCCURENCES      15

 INVERSION
   TYPE

   1                           6.6   6.6   6.6         6.6                      26.4

   2                          13.3   6.6               6.6                      26.5

   3                                            33.3  13.3                      46.6

   4

   5
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                 FREQUENCY SUMMARY OF MIXING HEIGHTS

      LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

     MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR    AUGUST  1980

     MIXING HEIGHT        MORNING            AFTERNOON
      (METERS)          OCCURENCES          OCCURENCES

         0- 100             7                   0

       101- 250             3                   0

       251- 500             1                   0

       501- 750             0                   2

       751-1000             0                   0

      1001-1500             0                   1

          >1500             0                   3

          TOTAL            11                   6

     AVERAGE WIND SPEED
     THROUGH MIXED
     LAYER (M/SEC)         2.9                 5.6

     AVERAGE LAPSE RATE
     BELOW FIRST INVER.
        (DEG C /100M)   -02.44              -00.98
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FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MONTH OF SEPTEMBER 1980 MORNING

THICKNESS (METERS)	*************** INVERSION BASE HEIGHT (METERS) *************** SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100	11.4	5.7	11.4	25.7	14.2	5.7	5.7	5.7				85.5
101-250	5.7	2.8	2.8									11.3
251-500	2.8											2.8
501-750												
TOTAL	19.9	8.5	14.2	25.7	14.2	5.7	5.7	5.7				
NO INVERSION												0.0
											TOTAL NO. OF OCCURENCES	35
INVERSION TYPE												
1	2.8		5.7	2.8	11.4	5.7	2.8	2.8				34.0
2	2.8		2.8	8.5			2.8	2.8				19.7
3	2.8	8.5	5.7	8.5	2.8							28.3
4	8.5			5.7								14.2
5	2.8											2.8

MONTH OF SEPTEMBER 1980 AFTERNOON

THICKNESS (METERS)	*************** INVERSION BASE HEIGHT (METERS) *************** SFC	001 TO 100	101 TO 250	251 TO 500	501 TO 750	751 TO 1000	1001 TO 1500	1501 TO 2000	2001 TO 2500	2501 TO 3000	> THAN 3000	TOTAL
001-100		6.2		25.0	12.5	6.2	12.5	12.5				74.9
101-250			6.2				6.2	6.2				18.6
251-500												
501-750												
TOTAL		6.2	6.2	25.0	12.5	6.2	18.7	18.7				
NO INVERSION												6.0
											TOTAL NO. OF OCCURENCES	15
INVERSION TYPE												
1		6.6	6.6	6.6	6.6		13.3	13.3				53.0
2				13.3			6.6					19.9
3						6.6		6.6				13.2
4				6.6	6.6							13.2
5												

FREQUENCY SUMMARY OF MIXING HEIGHTS

LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET

MIXING HEIGHTS -FREQUENCY OF OCCURENCE FOR SEPTEMBER 1980

MIXING HEIGHT (METERS)	MORNING OCCURENCES	AFTERNOON OCCURENCES
0- 100	5	0
101- 250	2	0
251- 500	1	1
501- 750	1	2
751-1000	0	0
1001-1500	0	0
>1500	1	2
TOTAL	10	5
AVERAGE WIND SPEED THROUGH MIXED LAYER (M/SEC)	3.9	5.6
AVERAGE LAPSE RATE BELOW FIRST INVER. (DEG C /100M)	-00.53	-01.83

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                  FREQUENCY SUMMARY OF INVERSIONS (PERCENTAGES)
    LOCATION: FLATHEAD CO - AIRPORT - FLATHEAD STUDY MET
                   MONTH OF      JULY 1978    MORNING

           *************** INVERSION BASE HEIGHT (METERS) ***************
           SFC   001   101   251   501   751  1001  1501  2001  2501    >
THICKNESS         TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN     TOTAL
 (METERS)        100   250   500   750  1000  1500  2000  2500  3000  3000

001-100   8.8         2.9   8.8   8.8   2.9   8.8                           41.0

101-250   5.8         2.9   8.8   8.8   2.9   5.8   2.9   2.9               40.8

251-500   8.8   2.9                                                         11.7

501-750

TOTAL    23.4   2.9   5.8  17.6  17.6   5.8  14.6   2.9   2.9

 NO INVERSION                                                                5.0

                                                   TOTAL NO. OF OCCURENCES     32

 INVERSION
   TYPE

  1       6.2                     6.2   3.1  12.5                           28.0

  2       3.1         6.2   9.3   6.2   3.1   3.1   3.1   3.1               37.2

  3       9.3   3.1         9.3   6.2                                       27.9

  4       6.2                                                                6.2

  5
                   MONTH OF      JULY 1978    AFTERNOON

           *************** INVERSION BASE HEIGHT (METERS) ***************
           SFC   001   101   251   501   751  1001  1501  2001  2501    >
THICKNESS         TO    TO    TO    TO    TO    TO    TO    TO    TO  THAN     TOTAL
 (METERS)        100   250   500   750  1000  1500  2000  2500  3000  3000

001-100         5.5   5.5  11.1         5.5  11.1         5.5               44.2

101-250                           5.5                     5.5               11.0

251-500                                       5.5                            5.5

501-750

TOTAL           5.5   5.5  11.1   5.5   5.5  16.6        11.0

 NO INVERSION                                                               38.0

                                                   TOTAL NO. OF OCCURENCES     11

 INVERSION
   TYPE

  1                                           9.0         9.0               18.0

  2                   9.0                    18.1                           27.1

  3             9.0        18.1   9.0   9.0                                 45.1

  4                                                       9.0                9.0

  5
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APPENDIX D

ACOUSTIC RADAR SUMMARIES

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF JULY 1978

******************** FIRST INVERSION ********************

DAY	0000-0600 MST BASE (100M)	TOP (100M)	TYPE *	0601-1200 MST BASE (100M)	TOP (100M)	TYPE *	1201-1800 MST BASE (100M)	TOP (100M)	TYPE *	1801-2400 MST BASE (100M)	TOP (100M)	TYPE *
1	M	M	M	M	M	M	M	M	M	M	M	M
2	M	M	M	M	M	M	M	M	M	M	M	M
3	M	M	M	M	M	M	N	N	N	0	2	4
4	0	2	4	4	5	4	3	4	4	0	2	4
5	0	2	3	0	2	3	N	N	N	0	1	4
6	0	2	4	2	3	4	N	N	N	M	M	M
7	M	M	M	M	M	M	M	M	M	M	M	M
8	M	M	M	M	M	M	M	M	M	M	M	M
9	M	M	M	M	M	M	M	M	M	M	M	M
10	M	M	M	M	M	M	N	N	N	0	1	4
11	0	3	4	1	2	4	4	5	4	0	2	4
12	0	2	4	2	3	4	N	N	N	0	2	4
13	0	3	4	2	3	4	N	N	N	0	1	4
14	0	2	4	3	4	4	N	N	N	0	1	4
15	0	4	4	3	4	4	N	N	N	0	1	3
16	0	1	4	N	N	N	N	N	N	0	1	3
17	0	1	3	0	2	3	N	N	N	0	2	4
18	0	2	4	0	1	4	N	N	N	0	1	3
19	0	4	3	3	4	4	N	N	N	0	1	4
20	0	3	3	N	N	N	N	N	N	0	2	4
21	0	3	3	3	4	4	N	N	N	0	1	3
22	0	4	4	3	4	4	N	N	N	0	2	4
23	0	4	4	3	4	4	N	N	N	0	1	4
24	0	2	4	2	3	4	N	N	N	0	1	4
25	0	3	4	3	4	4	N	N	N	0	1	4
26	0	3	4	3	4	4	N	N	N	0	1	4
27	N	N	N	N	N	N	N	N	N	0	1	4
28	0	2	4	3	4	4	N	N	N	0	1	4
29	0	2	4	2	3	4	N	N	N	0	1	4
30	0	3	4	N	N	N	N	N	N	0	2	3
31	0	1	3	N	N	N	N	N	N	0	1	3

******************** SECOND INVERSION ********************

DAY	0000-0600 MST BASE (100M)	TOP (100M)	TYPE *	0601-1200 MST BASE (100M)	TOP (100M)	TYPE *	1201-1800 MST BASE (100M)	TOP (100M)	TYPE *	1801-2400 MST BASE (100M)	TOP (100M)	TYPE *
1	M	M	M	M	M	M	M	M	M	M	M	M
2	M	M	M	M	M	M	M	M	M	M	M	M
3	M	M	M	M	M	M	N	N	N	N	N	N
4	4	5	4	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	M	M	M
7	M	M	M	M	M	M	M	M	M	M	M	M
8	M	M	M	M	M	M	M	M	M	M	M	M
9	M	M	M	M	M	M	M	M	M	M	M	M
10	M	M	M	M	M	M	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	3	4	4	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	N	N	N
15	N	N	N	N	N	N	N	N	N	N	N	N
16	N	N	N	N	N	N	N	N	N	N	N	N
17	N	N	N	N	N	N	N	N	N	N	N	N
18	N	N	N	N	N	N	N	N	N	N	N	N
19	N	N	N	N	N	N	N	N	N	N	N	N
20	N	N	N	N	N	N	N	N	N	N	N	N
21	N	N	N	N	N	N	N	N	N	N	N	N
22	N	N	N	N	N	N	N	N	N	N	N	N
23	N	N	N	N	N	N	N	N	N	N	N	N
24	3	4	4	N	N	N	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N
31	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 5=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                          MONTH OF JULY      1978

          ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100     200     300     400     500     600     700     800     900     TOTAL

---TIME     0- 600 MST ------------------------------------------------------------------------

 001-100      3      0       0       0       0       0       0       0       0       0        3
 101-300     16      0       0       0       0       0       0       0       0       0       16
 301-500      4      0       0       0       0       0       0       0       0       0        4
 501-900      0      0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                  1

  TOTAL      23      0       0       0       0       0       0       0       0       0       24

---TIME  601-1200 MST ------------------------------------------------------------------------

 001-100      1      1       5       9       1       0       0       0       0       0       17
 101-300      2      0       0       0       0       0       0       0       0       0        2
 301-500      0      0       0       0       0       0       0       0       0       0        0
 501-900      0      0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                  5

  TOTAL       3      1       5       9       1       0       0       0       0       0       24

---TIME 1201-1800 MST ------------------------------------------------------------------------

 001-100      0      0       0       1       1       0       0       0       0       0        2
 101-300      0      0       0       0       0       0       0       0       0       0        0
 301-500      0      0       0       0       0       0       0       0       0       0        0
 501-900      0      0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                 24

  TOTAL       0      0       0       1       1       0       0       0       0       0       26

---TIME 1801-2400 MST ------------------------------------------------------------------------

 001-100     17      0       0       0       0       0       0       0       0       0       17
 101-300      8      0       0       0       0       0       0       0       0       0        8
 301-500      0      0       0       0       0       0       0       0       0       0        0
 501-900      0      0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                  0

  TOTAL      25      0       0       0       0       0       0       0       0       0       25


----------------- FREQUENCY SUMMARY FOR FIRST INVERSION ---------------------------------------

 001-100     21      1       5      10       2       0       0       0       0       0       39
 101-300     26      0       0       0       0       0       0       0       0       0       26
 301-500      4      0       0       0       0       0       0       0       0       0        4
 501-900      0      0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                 30

  TOTAL      51      1       5      10       2       0       0       0       0       0       99
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                          ACCUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                          MONTH OF JULY      1978

        ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS            INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME     0- 600 MST ------------------------------------------------------------------

 001-100     0      0      0      2      1      0      0      0      0      0        3
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        21

  TOTAL      0      0      0      2      1      0      0      0      0      0       24

---TIME  601-1200 MST ------------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        24

  TOTAL      0      0      0      0      0      0      0      0      0      0       24

---TIME 1201-1800 MST ------------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        26

  TOTAL      0      0      0      0      0      0      0      0      0      0       26

---TIME 1801-2400 MST ------------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        25

  TOTAL      0      0      0      0      0      0      0      0      0      0       25

----------------- FREQUENCY SUMMARY FOR SECOND INVERSION ---------------------

 001-100     0      0      0      2      1      0      0      0      0      0        3
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        96

  TOTAL      0      0      0      2      1      0      0      0      0      0       99
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ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF JULY 1978

********* TWO HOUR STABILITY ANALYSIS *************************

	HOUR											
DAY	02	04	06	08	10	12	14	16	18	20	22	24
1	M	M	M	M	M	M	M	M	M	M	M	M
2	M	M	M	M	M	M	M	M	M	M	M	M
3	M	M	M	M	M	M	M	M	E	E	E	E
4	E	E	E	D	E	B	C	D	D	E	D	D
5	D	D	D	E	D	D	D	D	C	D	E	E
6	F	F	F	D	C	B	C	M	M	M	M	M
7	M	M	M	M	M	M	M	M	M	M	M	M
8	M	M	M	M	M	M	M	M	M	M	M	M
9	M	M	M	M	M	M	M	M	M	M	M	M
10	M	M	M	M	M	M	C	C	C	C	F	F
11	F	F	F	D	C	C	D	D	D	D	E	E
12	F	F	F	D	C	C	C	C	C	D	F	F
13	F	F	F	D	C	C	C	C	D	D	F	F
14	F	F	F	D	C	C	C	C	C	C	F	F
15	F	F	F	D	B	A	C	D	D	D	E	E
16	D	D	D	C	D	C	D	C	D	D	E	D
17	D	D	D	D	D	D	D	D	D	D	E	E
18	F	E	E	E	D	D	U	D	D	D	E	E
19	E	E	E	D	C	C	C	B	B	D	F	F
20	F	E	D	D	C	C	C	C	D	D	F	F
21	F	F	F	D	C	C	C	C	C	D	E	E
22	E	E	E	D	C	C	C	C	C	D	F	F
23	F	F	F	D	C	B	C	D	D	E	F	F
24	F	F	F	D	C	C	C	C	D	U	F	F
25	F	F	F	D	C	C	C	C	D	F	F	F
26	F	F	F	D	C	C	C	C	D	D	E	D
27	D	D	D	U	C	C	C	C	C	D	F	F
28	F	F	F	D	E	B	C	C	D	D	E	E
29	F	F	F	D	C	C	C	C	D	D	F	F
30	F	F	F	D	C	C	C	C	D	E	E	E
31	E	F	D	C	C	C	C	C	D	D	E	E

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.3 % B= 2.4 % C=21.5 % D=23.7 % E=11.3 % F=18.8 %

U= 0.8 % M=21.2 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF AUGUST 1978

************************ FIRST INVERSION **

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	0	3	3	N	N	N	N	N	N	0	3	3
2	0	2	3	N	N	N	N	N	N	0	2	4
3	0	3	4	N	N	N	N	N	N	N	N	N
4	0	4	4	N	N	N	N	N	N	0	2	4
5	0	4	4	N	N	N	N	N	N	0	1	4
6	0	2	4	N	N	N	N	N	N	N	N	N
7	0	3	4	N	N	N	N	N	N	0	2	4
8	0	4	4	N	N	N	N	N	N	0	2	4
9	0	3	4	N	N	N	N	N	N	0	1	4
10	0	3	4	1	3	4	N	N	N	0	1	3
11	0	2	4	N	N	N	N	N	N	0	1	4
12	0	3	4	1	2	4	N	N	N	N	N	N
13	0	1	4	N	N	N	N	N	N	0	2	4
14	0	3	4	N	N	N	N	N	N	N	N	N
15	N	N	N	N	N	N	N	N	N	0	1	4
16	0	1	4	N	N	N	N	N	N	0	1	3
17	0	1	4	N	N	N	N	N	N	0	1	4
18	0	2	3	0	1	3	N	N	N	0	1	4
19	0	2	4	N	N	N	N	N	N	0	2	4
20	0	2	4	2	3	4	N	N	N	N	N	N
21	3	4	4	N	N	N	N	N	N	0	1	4
22	0	4	4	3	4	4	N	N	N	0	3	3
23	0	2	3	N	N	N	N	N	N	0	2	4
24	0	5	4	3	4	4	N	N	N	0	1	4
25	0	4	4	0	1	4	N	N	N	0	1	4
26	0	2	4	N	N	N	N	N	N	0	2	4
27	0	3	4	2	3	4	N	N	N	0	2	4
28	0	3	4	3	4	4	N	N	N	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	M	M	M	M	M	M	M	M	M	M
31	M	M	M	M	M	M	M	M	M	M	M	M

********************** SECOND INVERSION **

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	N	N	N	N	N	N
3	N	N	N	N	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	N	N	N	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	N	N	N
15	N	N	N	N	N	N	N	N	N	N	N	N
16	N	N	N	N	N	N	N	N	N	N	N	N
17	3	4	4	N	N	N	N	N	N	N	N	N
18	4	5	4	3	4	4	N	N	N	N	N	N
19	N	N	N	N	N	N	N	N	N	4	5	4
20	3	4	4	N	N	N	N	N	N	2	3	4
21	N	N	N	N	N	N	N	N	N	N	N	N
22	N	N	N	N	N	N	N	N	N	N	N	N
23	N	N	N	N	N	N	N	N	N	N	N	N
24	N	N	N	N	N	N	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	M	M	M	M	M	M	M	M	M	M
31	M	M	M	M	M	M	M	M	M	M	M	M

NOTE: FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

ACCUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF AUGUST 1978

******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS	INVERSION BASE HEIGHT (IN METERS)									
(METERS)	SFC	100	200	300	400	500	600	700	800	900	TOTAL
---TIME 0- 600 MST											
001-100	3	0	0	1	0	0	0	0	0	0	4
101-300	17	0	0	0	0	0	0	0	0	0	17
301-500	6	0	0	0	0	0	0	0	0	0	6
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											1
TOTAL	26	0	0	1	0	0	0	0	0	0	28
---TIME 601-1200 MST											
001-100	2	1	2	3	0	0	0	0	0	0	8
101-300	0	1	0	0	0	0	0	0	0	0	1
301-500	0	0	0	0	0	0	0	0	0	0	0
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											19
TOTAL	2	2	2	3	0	0	0	0	0	0	28
---TIME 1201-1800 MST											
001-100	0	0	0	0	0	0	0	0	0	0	0
101-300	0	0	0	0	0	0	0	0	0	0	0
301-500	0	0	0	0	0	0	0	0	0	0	0
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											28
TOTAL	0	0	0	0	0	0	0	0	0	0	28
---TIME 1801-2400 MST											
001-100	11	0	0	0	0	0	0	0	0	0	11
101-300	11	0	0	0	0	0	0	0	0	0	11
301-500	0	0	0	0	0	0	0	0	0	0	0
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											5
TOTAL	22	0	0	0	0	0	0	0	0	0	27
FREQUENCY SUMMARY FOR FIRST INVERSION											
001-100	16	1	2	4	0	0	0	0	0	0	23
101-300	28	1	0	0	0	0	0	0	0	0	29
301-500	6	0	0	0	0	0	0	0	0	0	6
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											53
TOTAL	50	2	2	4	0	0	0	0	0	0	111

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                         ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                      MONTH OF AUGUST   1978

       ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS            INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME     0- 600 MST ----------------------------------------------------------------

 001-100     0      0      0      2      1      0      0      0      0      0       3
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        25

  TOTAL      0      0      0      2      1      0      0      0      0      0      28

---TIME   601-1200 MST ----------------------------------------------------------------

 001-100     0      0      0      1      0      0      0      0      0      0       1
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        27

  TOTAL      0      0      0      1      0      0      0      0      0      0      28

---TIME 1201-1800 MST -----------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0       0
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        28

  TOTAL      0      0      0      0      0      0      0      0      0      0      28

---TIME 1801-2400 MST -----------------------------------------------------------------

 001-100     0      0      1      0      1      0      0      0      0      0       2
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        25

  TOTAL      0      0      1      0      1      0      0      0      0      0      27


----------------- FREQUENCY SUMMARY FOR SECOND INVERSION -------------------------

 001-100     0      0      1      3      2      0      0      0      0      0       6
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                       105

  TOTAL      0      0      1      3      2      0      0      0      0      0     111
```

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF AUGUST 1978

********* TWO HOUR STABILITY ANALYSIS **************************

	HOUR										
DAY	02	04	06	08	10	12	14	16	18	20	22	24
1	E	E	E	D	C	C	D	D	E	E	E	E
2	E	E	E	D	C	C	C	B	C	D	F	F
3	F	F	F	D	B	B	C	C	C	D	D	F
4	F	F	F	D	C	C	C	C	D	F	F	F
5	F	E	E	D	C	C	C	C	D	E	F	F
6	F	F	F	D	C	C	C	D	U	U	D	F
7	F	F	F	D	C	C	C	C	C	D	F	F
8	F	F	F	D	C	C	C	C	C	D	F	F
9	F	F	F	D	C	C	C	C	D	D	E	D
10	F	F	F	F	D	C	C	C	D	E	E	E
11	F	F	F	D	C	C	C	C	D	D	F	F
12	F	F	F	D	C	C	D	D	D	D	D	E
13	D	D	E	D	C	C	D	D	D	D	E	E
14	E	E	E	D	C	C	C	C	D	D	D	D
15	D	D	D	U	D	D	D	D	D	E	D	D
16	D	D	D	D	C	D	D	D	C	D	E	D
17	D	D	D	D	D	D	C	C	D	D	E	D
18	E	E	E	E	D	C	D	C	D	E	E	E
19	E	E	E	D	D	C	C	D	E	D	E	E
20	E	E	D	D	D	D	D	D	D	D	D	D
21	D	D	D	D	C	D	C	C	C	D	E	E
22	E	E	E	D	D	D	D	D	D	E	D	D
23	D	D	E	D	C	C	C	D	C	D	F	F
24	F	F	F	D	C	C	C	C	D	D	F	F
25	F	E	E	E	D	C	C	C	D	D	F	F
26	F	E	E	D	C	C	C	C	D	D	F	F
27	F	F	F	D	C	C	C	C	D	F	F	F
28	F	F	F	D	B	B	C	M	M	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	M	M	M	M	M	M	M	M	M	M
31	M	M	M	M	M	M	M	M	M	M	M	M

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.0 % B= 1.3 % C=21.8 % D=32.8 % E=14.5 % F=17.7 %

U= 0.8 % M=11.0 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF OCTOBER 1978

************************ FIRST INVERSION ************************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	M	M	M	M	M	M	M	M	M	M	M	M
2	M	M	M	M	M	M	M	M	M	M	M	M
3	M	M	M	M	M	M	M	M	M	M	M	M
4	M	M	M	M	M	M	M	M	M	M	M	M
5	M	M	M	M	M	M	M	M	M	M	M	M
6	M	M	M	M	M	M	M	M	M	M	M	M
7	M	M	M	M	M	M	M	M	M	M	M	M
8	M	M	M	M	M	M	M	M	M	M	M	M
9	M	M	M	M	M	M	M	M	M	M	M	M
10	M	M	M	M	M	M	M	M	M	M	M	M
11	M	M	M	M	M	M	M	M	M	M	M	M
12	M	M	M	M	M	M	N	N	N	0	2	4
13	0	4	4	0	4	4	N	N	N	0	2	4
14	0	3	4	0	4	4	3	4	2	0	2	4
15	0	4	4	3	4	4	4	5	2	0	1	4
16	0	2	4	0	3	4	3	4	2	0	2	4
17	0	3	4	0	3	4	N	N	N	0	2	4
18	0	4	4	0	4	4	4	5	2	0	2	4
19	0	4	4	0	4	4	3	4	4	0	2	4
20	0	5	4	0	4	4	N	N	N	0	2	3
21	0	2	3	0	2	3	N	N	N	0	3	4
22	0	4	4	0	3	4	N	N	N	0	3	4
23	0	3	4	0	3	4	N	N	N	0	2	3
24	N	N	N	N	N	N	N	N	N	0	3	4
25	0	4	4	0	3	4	N	N	N	0	2	4
26	0	4	4	0	4	4	N	N	N	0	2	4
27	0	2	4	N	N	N	N	N	N	0	1	4
28	0	1	4	N	N	N	N	N	N	0	1	4
29	0	2	4	N	N	N	N	N	N	0	1	4
30	0	2	4	0	1	4	N	N	N	0	2	4
31	0	3	4	0	3	4	N	N	N	0	2	4

************************ SECOND INVERSION ************************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	M	M	M	M	M	M	M	M	M	M	M	M
2	M	M	M	M	M	M	M	M	M	M	M	M
3	M	M	M	M	M	M	M	M	M	M	M	M
4	M	M	M	M	M	M	M	M	M	M	M	M
5	M	M	M	M	M	M	M	M	M	M	M	M
6	M	M	M	M	M	M	M	M	M	M	M	M
7	M	M	M	M	M	M	M	M	M	M	M	M
8	M	M	M	M	M	M	M	M	M	M	M	M
9	M	M	M	M	M	M	M	M	M	M	M	M
10	M	M	M	M	M	M	M	M	M	M	M	M
11	M	M	M	M	M	M	M	M	M	M	M	M
12	M	M	M	M	M	M	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	4	5	2
15	N	N	N	6	7	2	N	N	N	4	5	2
16	4	5	2	4	5	2	N	N	N	N	N	N
17	N	N	N	N	N	N	N	N	N	N	N	N
18	N	N	N	N	N	N	N	N	N	4	5	2
19	N	N	N	N	N	N	N	N	N	3	4	4
20	N	N	N	N	N	N	N	N	N	N	N	N
21	N	N	N	N	N	N	N	N	N	N	N	N
22	N	N	N	N	N	N	N	N	N	N	N	N
23	4	5	4	4	5	4	N	N	N	N	N	N
24	N	N	N	N	N	N	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N
31	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL, 2=SUBSIDENCE, 3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 5=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                        ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                   MONTH OF OCTOBER  1978

      ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS           INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST ------------------------------------------------------------------

 001-100     1      0      0      0      0      0      0      0      0      0        1
 101-300     9      0      0      0      0      0      0      0      0      0        9
 301-500     8      0      0      0      0      0      0      0      0      0        8
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                         1

  TOTAL     18      0      0      0      0      0      0      0      0      0       19

---TIME  601-1200 MST ------------------------------------------------------------------

 001-100     1      0      0      1      0      0      0      0      0      0        2
 101-300     7      0      0      0      0      0      0      0      0      0        7
 301-500     6      0      0      0      0      0      0      0      0      0        6
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                         4

  TOTAL     14      0      0      1      0      0      0      0      0      0       19

---TIME 1201-1800 MST ------------------------------------------------------------------

 001-100     0      0      0      3      2      0      0      0      0      0        5
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        15

  TOTAL      0      0      0      3      2      0      0      0      0      0       20

---TIME 1801-2400 MST ------------------------------------------------------------------

 001-100     4      0      0      0      0      0      0      0      0      0        4
 101-300    16      0      0      0      0      0      0      0      0      0       16
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                         0

  TOTAL     20      0      0      0      0      0      0      0      0      0       20


----------------- FREQUENCY SUMMARY FOR FIRST INVERSION --------------------------------

 001-100     6      0      0      4      2      0      0      0      0      0       12
 101-300    32      0      0      0      0      0      0      0      0      0       32
 301-500    14      0      0      0      0      0      0      0      0      0       14
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        20

  TOTAL     52      0      0      4      2      0      0      0      0      0       78
```

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                    ACCUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                  MONTH OF OCTOBER  1978

      ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100   200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST -------------------------------------------------------------------

 001-100     0     0     0      0      2      0      0      0      0      0       2
 101-300     0     0     0      0      0      0      0      0      0      0       0
 301-500     0     0     0      0      0      0      0      0      0      0       0
 501-900     0     0     0      0      0      0      0      0      0      0       0
NO INVERSION                                                                     17

  TOTAL      0     0     0      0      2      0      0      0      0      0      19

---TIME  601-1200 MST -------------------------------------------------------------------

 001-100     0     0     0      0      2      0      1      0      0      0       3
 101-300     0     0     0      0      0      0      0      0      0      0       0
 301-500     0     0     0      0      0      0      0      0      0      0       0
 501-900     0     0     0      0      0      0      0      0      0      0       0
NO INVERSION                                                                     16

  TOTAL      0     0     0      0      2      0      1      0      0      0      19

---TIME 1201-1800 MST -------------------------------------------------------------------

 001-100     0     0     0      0      0      0      0      0      0      0       0
 101-300     0     0     0      0      0      0      0      0      0      0       0
 301-500     0     0     0      0      0      0      0      0      0      0       0
 501-900     0     0     0      0      0      0      0      0      0      0       0
NO INVERSION                                                                     20

  TOTAL      0     0     0      0      0      0      0      0      0      0      20

---TIME 1801-2400 MST -------------------------------------------------------------------

 001-100     0     0     0      1      3      0      0      0      0      0       4
 101-300     0     0     0      0      0      0      0      0      0      0       0
 301-500     0     0     0      0      0      0      0      0      0      0       0
 501-900     0     0     0      0      0      0      0      0      0      0       0
NO INVERSION                                                                     16

  TOTAL      0     0     0      1      3      0      0      0      0      0      20


---------------- FREQUENCY SUMMARY FOR SECOND INVERSION ---------------------

 001-100     0     0     0      1      7      0      1      0      0      0       9
 101-300     0     0     0      0      0      0      0      0      0      0       0
 301-500     0     0     0      0      0      0      0      0      0      0       0
 501-900     0     0     0      0      0      0      0      0      0      0       0
NO INVERSION                                                                     69

  TOTAL      0     0     0      1      7      0      1      0      0      0      78
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                           ACOUSTIC RADAR ANALYSIS
FLATHEAD ENVIRONMENTAL STUDY                         MONTH OF OCTOBER  1978

********* TWO HOUR STABILITY ANALYSIS **************************
        -------------------- HOUR ------------------------------
DAY    02   04   06   08   10   12   14   16   18   20   22   24
  1     M    M    M    M    M    M    M    M    M    M    M    M
  2     M    M    M    M    M    M    M    M    M    M    M    M
  3     M    M    M    M    M    M    M    M    M    M    M    M
  4     M    M    M    M    M    M    M    M    M    M    M    M
  5     M    M    M    M    M    M    M    M    M    M    M    M
  6     M    M    M    M    M    M    M    M    M    M    M    M
  7     M    M    M    M    M    M    M    M    M    M    M    M
  8     M    M    M    M    M    M    M    M    M    M    M    M
  9     M    M    M    M    M    M    M    M    M    M    M    M
 10     M    M    M    M    M    M    M    M    M    M    M    M
 11     M    M    M    M    M    M    M    M    M    M    M    M
 12     M    M    M    M    M    M    C    C    D    F    F    F
 13     F    F    F    E    D    B    C    C    D    F    F    F
 14     F    F    F    F    D    B    C    C    D    F    F    F
 15     F    F    F    D    C    C    C    C    D    E    E    E
 16     E    E    E    E    D    B    C    C    D    D    E    E
 17     E    E    E    E    D    B    C    C    D    F    F    F
 18     F    F    F    F    D    C    C    C    D    F    F    F
 19     F    F    F    F    D    B    C    C    D    F    F    F
 20     F    E    E    E    D    B    C    C    D    D    F    F
 21     E    D    E    D    D    D    D    D    D    E    F    F
 22     F    F    F    F    D    B    C    C    D    E    E    E
 23     E    E    E    E    D    C    C    D    E    E    E    E
 24     D    D    D    D    D    D    D    D    E    F    F    F
 25     F    E    E    E    D    B    C    C    E    F    F    F
 26     F    F    F    F    D    B    C    C    E    E    F    F
 27     E    E    D    D    D    D    D    D    D    E    E    D
 28     D    E    E    D    B    B    C    D    E    E    E    E
 29     E    D    D    D    D    D    D    D    U    E    E    E
 30     E    E    E    E    D    C    C    B    D    E    F    F
 31     F    F    F    E    D    C    C    C    D    F    F    F
           PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY
    A= 0.0 %   B= 3.2 %   C= 9.4 %   D=16.7 %   E=15.6 %   F=17.7 %
    U= 0.3 %   M=37.1 %
NOTE: U=UNKNOWN M=MISSING DATA
      CLOUD COVER CONDITIONS USED FROM NWS STATION  AT KALISPELL
      WIND DATA USED FROM NWS STATION AT KALISPELL
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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                          MONTH OF NOVEMBER 1978

************************ FIRST INVERSION ****************************************
       0000-0600 MST        0601-1200 MST        1201-1800 MST        1801-2400 MST
DAY     BASE TOP  TYPE     BASE  TOP  TYPE     BASE  TOP  TYPE     BASE  TOP  TYPE
       (100M)(100M) *      (100M)(100M) *      (100M)(100M) *      (100M)(100M) *

 1        0     3    4       5     6    2        4     5    2        0     2    4
 2        0     4    4       0     4    4        N     N    N        0     2    4
 3        N     N    N       N     N    N        0     2    3        0     2    3
 4        N     N    N       N     N    N        N     N    N        0     1    4
 5        0     2    4       0     1    4        N     N    N        0     1    4
 6        0     2    4       0     2    4        N     N    N        0     2    4
 7        0     2    4       0     2    4        N     N    N        0     2    3
 8        N     N    N       N     N    N        N     N    N        0     2    3
 9        N     N    N       N     N    N        N     N    N        N     N    N
10        N     N    N       N     N    N        N     N    N        0     2    4
11        0     2    4       0     2    4        N     N    N        0     1    4
12        0     2    4       N     N    N        N     N    N        0     1    4
13        N     N    N       N     N    N        N     N    N        0     2    4
14        0     4    4       0     4    4        N     N    N        0     2    4
15        0     5    4       0     5    4        4     5    5        0     1    4
16        0     3    4       0     3    4        0     3    4        0     2    4
17        N     N    N       N     N    N        N     N    N        2     3    3
18        2     3    3       N     N    N        N     N    N        N     N    N
19        N     N    N       N     N    N        N     N    N        N     N    N
20        N     N    N       N     N    N        N     N    N        0     1    4
21        0     2    4       0     2    4        N     N    N        0     2    4
22        0     2    4       0     2    4        0     3    4        0     2    4
23        0     2    4       0     2    4        0     2    4        0     2    4
24        0     2    4       0     2    4        0     2    4        0     3    4
25        0     2    4       0     3    4        N     N    N        0     2    4
26        0     2    4       0     2    4        N     N    N        0     2    4
27        0     2    4       0     2    4        N     N    N        0     2    4
28        N     N    N       N     N    N        0     1    3        0     1    3
29        0     2    4       0     3    4        0     2    4        0     3    4
30        0     4    4       0     3    4        0     2    4        N     N    N

*********************** SECOND INVERSION ****************************************
       0000-0600 MST        0601-1200 MST        1201-1800 MST        1801-2400 MST
DAY     BASE TOP  TYPE     BASE  TOP  TYPE     BASE  TOP  TYPE     BASE  TOP  TYPE
       (100M)(100M) *      (100M)(100M) *      (100M)(100M) *      (100M)(100M) *

 1        5     6    2       N     N    N        N     N    N        5     6    2
 2        N     N    N       N     N    N        N     N    N        N     N    N
 3        N     N    N       N     N    N        N     N    N        N     N    N
 4        N     N    N       N     N    N        N     N    N        N     N    N
 5        N     N    N       N     N    N        N     N    N        N     N    N
 6        N     N    N       N     N    N        N     N    N        N     N    N
 7        N     N    N       N     N    N        N     N    N        N     N    N
 8        N     N    N       N     N    N        N     N    N        N     N    N
 9        N     N    N       N     N    N        N     N    N        N     N    N
10        N     N    N       N     N    N        N     N    N        N     N    N
11        N     N    N       N     N    N        N     N    N        N     N    N
12        N     N    N       N     N    N        N     N    N        N     N    N
13        N     N    N       N     N    N        N     N    N        N     N    N
14        N     N    N       N     N    N        N     N    N        N     N    N
15        N     N    N       N     N    N        N     N    N        4     5    4
16        4     5    4       5     6    4        5     6    4        4     4    4
17        N     N    N       N     N    N        N     N    N        N     N    N
18        N     N    N       N     N    N        N     N    N        N     N    N
19        N     N    N       N     N    N        N     N    N        N     N    N
20        N     N    N       N     N    N        N     N    N        N     N    N
21        N     N    N       N     N    N        N     N    N        N     N    N
22        N     N    N       N     N    N        N     N    N        4     5    4
23        3     4    4       3     4    4        3     4    4        4     5    4
24        3     4    4       4     5    4        N     N    N        N     N    N
25        N     N    N       N     N    N        N     N    N        N     N    N
26        N     N    N       N     N    N        N     N    N        N     N    N
27        N     N    N       N     N    N        N     N    N        N     N    N
28        N     N    N       N     N    N        N     N    N        N     N    N
29        N     N    N       N     N    N        N     N    N        N     N    N
30        N     N    N       N     N    N        N     N    N        N     N    N

    NOTE:  FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
                   4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
           N=NO INVERSION M=MISSING DATA OR UNKNOWN
```

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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                         MONTH OF NOVEMBER 1978

          ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS            INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100    200    300    400    500    600    700    800    900     TOTAL

---TIME    0- 600 MST ------------------------------------------------------------------

 001-100      0      0      1      0      0      0      0      0      0      0         1
 101-300     15      0      0      0      0      0      0      0      0      0        15
 301-500      4      0      0      0      0      0      0      0      0      0         4
 501-900      0      0      0      0      0      0      0      0      0      0         0
NO INVERSION                                                                          10

  TOTAL      19      0      1      0      0      0      0      0      0      0        30

---TIME  601-1200 MST ------------------------------------------------------------------

 001-100      1      0      0      0      0      1      0      0      0      0         2
 101-300     13      0      0      0      0      0      0      0      0      0        13
 301-500      3      0      0      0      0      0      0      0      0      0         3
 501-900      0      0      0      0      0      0      0      0      0      0         0
NO INVERSION                                                                          12

  TOTAL      17      0      0      0      0      1      0      0      0      0        30

---TIME 1201-1800 MST ------------------------------------------------------------------

 001-100      1      0      0      0      2      0      0      0      0      0         3
 101-300      7      0      0      0      0      0      0      0      0      0         7
 301-500      0      0      0      0      0      0      0      0      0      0         0
 501-900      0      0      0      0      0      0      0      0      0      0         0
NO INVERSION                                                                          20

  TOTAL       8      0      0      0      2      0      0      0      0      0        30

---TIME 1801-2400 MST ------------------------------------------------------------------

 001-100      7      0      1      0      0      0      0      0      0      0         8
 101-300     18      0      0      0      0      0      0      0      0      0        18
 301-500      0      0      0      0      0      0      0      0      0      0         0
 501-900      0      0      0      0      0      0      0      0      0      0         0
NO INVERSION                                                                           4

  TOTAL      25      0      1      0      0      0      0      0      0      0        30


----------------- FREQUENCY SUMMARY FOR FIRST INVERSION --------------------------------

 001-100      9      0      2      0      2      1      0      0      0      0        14
 101-300     53      0      0      0      0      0      0      0      0      0        53
 301-500      7      0      0      0      0      0      0      0      0      0         7
 501-900      0      0      0      0      0      0      0      0      0      0         0
NO INVERSION                                                                          46

  TOTAL      69      0      2      0      2      1      0      0      0      0       120
```

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                        ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                   MONTH OF NOVEMBER 1978

      ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS        INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST -----------------------------------------------------------------

 001-100     0      0      0      2      1      1      0      0      0      0       4
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        26

  TOTAL      0      0      0      2      1      1      0      0      0      0      30

---TIME  601-1200 MST -----------------------------------------------------------------

 001-100     0      0      0      1      1      1      0      0      0      0       3
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        27

  TOTAL      0      0      0      1      1      1      0      0      0      0      30

---TIME 1201-1800 MST -----------------------------------------------------------------

 001-100     0      0      0      1      0      1      0      0      0      0       2
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        28

  TOTAL      0      0      0      1      0      1      0      0      0      0      30

---TIME 1801-2400 MST -----------------------------------------------------------------

 001-100     0      0      0      0      4      1      0      0      0      0       5
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        25

  TOTAL      0      0      0      0      4      1      0      0      0      0      30

---------------- FREQUENCY SUMMARY FOR SECOND INVERSION ------------------------------

 001-100     0      0      0      4      6      4      0      0      0      0      14
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                       106

  TOTAL      0      0      0      4      6      4      0      0      0      0     120
```

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                         ACOUSTIC RADAR ANALYSIS
FLATHEAD ENVIRONMENTAL STUDY                     MONTH OF NOVEMBER 1978


********* TWO HOUR STABILITY ANALYSIS **************************

          --------------------- HOUR ------------------------------
DAY    02    04    06    08    10    12    14    16    18    20    22    24

 1     F     F     F     D     D     C     B     B     D     F     F     F

 2     F     F     F     F     D     B     E     D     D     E     E     E

 3     D     D     D     D     D     D     D     E     D     D     D     D

 4     D     D     D     D     D     D     D     D     D     E     F     F

 5     F     F     F     F     D     C     C     D     D     E     E     E

 6     E     E     E     E     D     C     C     D     E     E     E     E

 7     E     E     E     E     D     D     D     D     E     E     D     D

 8     D     D     D     E     D     D     D     D     D     E     D     E

 9     D     D     D     D     D     D     D     D     D     D     D     D

10     D     D     D     D     D     C     C     C     E     E     E     E

11     F     E     E     F     D     C     C     C     D     D     F     F

12     F     E     E     D     D     D     D     D     D     D     E     D

13     D     D     D     D     D     B     C     C     F     E     E     E

14     E     E     E     E     D     B     C     C     D     F     F     F

15     F     F     F     E     D     B     C     B     D     E     E     E

16     E     D     E     D     D     D     D     D     D     E     E     E

17     D     D     D     D     D     D     D     D     D     D     D     D

18     D     D     D     D     D     D     D     D     D     D     D     D

19     D     D     D     D     D     D     D     D     D     D     D     D

20     D     D     D     D     D     C     C     D     D     E     E     E

21     E     F     F     F     D     C     B     B     D     F     F     F

22     F     E     D     D     D     D     D     D     D     D     D     D

23     E     E     D     D     D     E     E     E     E     E     E     E

24     E     E     E     E     D     D     E     D     D     D     D     D

25     D     D     D     E     E     D     B     D     E     E     E     E

26     E     E     D     D     D     D     B     D     D     E     E     E

27     E     E     E     D     D     D     D     D     E     E     D     D

28     D     D     D     D     D     D     E     E     E     E     E     E

29     E     E     E     E     E     E     E     E     E     E     E     E

30     E     E     D     D     D     D     D     D     D     D     D     D

             PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

    A= 0.0 %   B= 3.3 %   C= 5.3 %   D=52.5 %   E=29.2 %   F= 9.7 %

    U= 0.0 %   M= 0.0 %

NOTE: U=UNKNOWN M=MISSING DATA
      CLOUD COVER CONDITIONS USED FROM NWS STATION  AT KALISPELL
      WIND DATA USED FROM NWS STATION AT KALISPELL
```

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF DECEMBER 1978

************************ FIRST INVERSION ************************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	3	4	3	3	4	3	1	2	3	0	2	4
2	0	2	4	0	2	4	0	4	4	0	3	4
3	0	3	4	N	N	N	N	N	N	0	1	3
4	0	1	4	N	N	N	N	N	N	0	1	4
5	0	2	4	0	2	4	0	2	4	0	2	4
6	0	2	4	0	2	4	N	N	N	0	2	4
7	0	2	4	0	1	4	2	3	4	0	2	4
8	0	2	4	0	2	4	0	2	4	0	2	4
9	0	2	4	0	3	4	0	3	4	0	3	4
10	0	3	4	0	3	4	1	3	4	0	3	4
11	0	3	4	0	3	3	N	N	N	0	1	3
12	0	1	3	0	1	3	N	N	N	0	1	4
13	0	3	4	0	4	4	2	4	4	0	3	4
14	0	3	4	0	2	4	N	N	N	0	1	4
15	0	2	3	0	1	3	0	1	3	0	1	3
16	0	1	3	0	2	4	N	N	N	0	2	4
17	0	3	4	0	2	4	3	4	4	0	1	4
18	0	1	4	4	5	4	4	5	4	0	1	4
19	0	1	4	0	1	4	0	1	3	0	1	3
20	0	1	3	0	1	3	1	2	3	0	2	3
21	N	N	N	N	N	N	N	N	N	0	1	3
22	N	N	N	N	N	N	2	3	4	0	1	4
23	0	1	4	0	1	4	N	N	N	0	2	4
24	0	1	4	0	1	4	N	N	N	0	1	4
25	0	1	4	0	2	4	0	1	4	0	2	4
26	0	3	4	0	4	4	N	N	N	0	1	4
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	0	2	4	0	3	4	1	2	4	0	2	4
30	0	2	4	0	3	4	0	2	4	0	2	4
31	0	2	3	0	3	4	0	1	4	0	2	4

************************ SECOND INVERSION ************************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	N	N	N	N	N	N
3	N	N	N	N	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	N	N	N	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	N	N	N
15	N	N	N	N	N	N	N	N	N	N	N	N
16	N	N	N	N	N	N	N	N	N	N	N	N
17	N	N	N	3	4	4	N	N	N	3	5	4
18	3	4	4	N	N	N	N	N	N	4	5	4
19	3	4	4	2	3	4	N	N	N	N	N	N
20	N	N	N	N	N	N	N	N	N	N	N	N
21	N	N	N	N	N	N	N	N	N	N	N	N
22	N	N	N	N	N	N	N	N	N	N	N	N
23	N	N	N	N	N	N	N	N	N	3	4	4
24	4	5	4	N	N	N	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N
31	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 5=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                              ACOUSTIC RADAR ANALYSIS
FLATHEAD ENVIRONMENTAL STUDY                          MONTH OF DECEMBER 1978
          ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******
THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL
---TIME    0- 600 MST ------------------------------------------------------------------
 001-100      0      0      0      2      1      0      0      0      0      0        3
 101-300      0      0      0      0      0      0      0      0      0      0        0
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                          28
  TOTAL       0      0      0      2      1      0      0      0      0      0       31
---TIME  601-1200 MST ------------------------------------------------------------------
 001-100      0      0      1      1      0      0      0      0      0      0        2
 101-300      0      0      0      0      0      0      0      0      0      0        0
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                          29
  TOTAL       0      0      1      1      0      0      0      0      0      0       31
---TIME 1201-1800 MST ------------------------------------------------------------------
 001-100      0      0      0      0      0      0      0      0      0      0        0
 101-300      0      0      0      0      0      0      0      0      0      0        0
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                          31
  TOTAL       0      0      0      0      0      0      0      0      0      0       31
---TIME 1801-2400 MST ------------------------------------------------------------------
 001-100      0      0      0      1      1      0      0      0      0      0        2
 101-300      0      0      0      1      0      0      0      0      0      0        1
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                          28
  TOTAL       0      0      0      2      1      0      0      0      0      0       31

----------------- FREQUENCY SUMMARY FOR SECOND INVERSION -------------------------------
 001-100      0      0      1      4      2      0      0      0      0      0        7
 101-300      0      0      0      1      0      0      0      0      0      0        1
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                         116
  TOTAL       0      0      1      5      2      0      0      0      0      0      124
```

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                          ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                    MONTH OF DECEMBER 1978

        ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS         INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST ------------------------------------------------------------------

 001-100     9     0      0      1      0      0      0      0      0      0       10
 101-300    17     0      0      0      0      0      0      0      0      0       17
 301-500     0     0      0      0      0      0      0      0      0      0        0
 501-900     0     0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        4

  TOTAL     26     0      0      1      0      0      0      0      0      0       31

---TIME  601-1200 MST ------------------------------------------------------------------

 001-100     7     0      0      1      1      0      0      0      0      0        9
 101-300    14     0      0      0      0      0      0      0      0      0       14
 301-500     2     0      0      0      0      0      0      0      0      0        2
 501-900     0     0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        6

  TOTAL     23     0      0      1      1      0      0      0      0      0       31

---TIME 1201-1800 MST ------------------------------------------------------------------

 001-100     4     3      2      1      1      0      0      0      0      0       11
 101-300     4     1      1      0      0      0      0      0      0      0        6
 301-500     1     0      0      0      0      0      0      0      0      0        1
 501-900     0     0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                       13

  TOTAL      9     4      3      1      1      0      0      0      0      0       31

---TIME 1801-2400 MST ------------------------------------------------------------------

 001-100    13     0      0      0      0      0      0      0      0      0       13
 101-300    16     0      0      0      0      0      0      0      0      0       16
 301-500     0     0      0      0      0      0      0      0      0      0        0
 501-900     0     0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        2

  TOTAL     29     0      0      0      0      0      0      0      0      0       31


----------------- FREQUENCY SUMMARY FOR FIRST INVERSION -----------------------

 001-100    33     3      2      3      2      0      0      0      0      0       43
 101-300    51     1      1      0      0      0      0      0      0      0       53
 301-500     3     0      0      0      0      0      0      0      0      0        3
 501-900     0     0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                       25

  TOTAL     87     4      3      3      2      0      0      0      0      0      124
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                              ACOUSTIC RADAR ANALYSIS
FLATHEAD ENVIRONMENTAL STUDY                              MONTH OF DECEMBER 1978

********* TWO HOUR STABILITY ANALYSIS **************************

          --------------------- HOUR ---------------------------------
DAY    02    04    06    08    10    12    14    16    18    20    22    24
 1     D     E     D     D     D     D     D     D     C     C     E     E
 2     E     E     D     D     D     D     D     D     D     D     D     D
 3     D     D     D     D     D     D     D     D     D     D     E     D
 4     D     D     D     D     D     D     D     C     E     E     E     E
 5     F     E     E     E     E     E     E     E     E     E     E     E
 6     E     E     E     E     E     D     C     C     E     F     F     F
 7     F     E     E     E     E     D     D     D     D     D     E     D
 8     D     D     D     D     D     D     D     D     D     D     D     D
 9     D     D     D     D     D     D     D     D     D     D     D     D
10     D     D     E     E     E     D     B     C     E     E     E     D
11     D     D     D     D     E     D     D     D     D     E     E     E
12     E     D     D     E     D     D     D     D     F     F     E     F
13     F     F     F     F     F     D     D     C     E     E     F     E
14     E     E     E     D     D     D     D     D     E     E     F     F
15     E     D     D     D     D     D     D     F     F     F     F     E
16     E     E     E     E     E     D     D     D     D     E     E     E
17     E     E     E     E     E     E     D     D     D     E     E     E
18     D     D     D     D     D     D     D     D     D     D     E     D
19     D     D     D     D     D     E     D     D     E     D     D     D
20     E     E     D     E     D     D     D     D     E     E     D     D
21     D     D     D     D     D     D     D     E     E     E     E     E
22     D     D     D     D     D     D     D     D     E     E     E     E
23     E     F     F     E     E     D     D     D     D     E     D     D
24     D     D     D     D     D     D     D     D     E     E     F     F
25     F     F     F     E     F     F     D     D     D     E     F     F
26     F     E     E     E     E     D     D     E     E     D     D     D
27     D     D     D     D     D     D     D     D     D     D     D     D
28     D     D     D     D     D     D     D     C     D     D     D     D
29     E     F     F     F     D     D     B     E     B     F     F     D
30     D     D     D     D     D     D     D     D     D     D     D     D
31     E     E     E     F     E     E     D     D     D     F     F     F
            PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

      A= 0.0 %  B= 1.1 %  C= 1.9 %  D=58.1 %  E=28.5 %  F=10.5 %

      U= 0.0 %  M= 0.0 %

NOTE: U=UNKNOWN M=MISSING DATA
        CLOUD COVER CONDITIONS USED FROM NWS STATION  AT KALISPELL
        WIND DATA USED FROM NWS STATION AT KALISPELL
```

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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                      MONTH OF JANUARY  1979

************************ FIRST INVERSION ******************************************
       0000-0600 MST       0601-1200 MST       1201-1800 MST       1801-2400 MST
DAY    BASE TOP  TYPE      BASE  TOP  TYPE     BASE  TOP  TYPE     BASE  TOP  TYPE
       (100M)(100M) *      (100M)(100M) *      (100M)(100M) *      (100M)(100M) *

  1      0    5    4         0    4    4         0    2    4         0    2    4
  2      0    2    4         0    2    4         N    N    N         0    3    4
  3      0    3    4         0    4    4         2    4    4         0    3    4
  4      0    2    3         0    4    4         2    3    4         0    2    4
  5      0    4    4         0    4    4         0    2    4         0    4    4
  6      0    3    4         0    3    4         0    2    4         0    2    4
  7      0    2    4         0    5    4         0    4    4         0    2    4
  8      0    4    4         0    5    4         1    5    4         0    1    4
  9      0    2    4         0    5    4         2    5    4         4    5    4
 10      2    4    4         1    4    4         0    3    4         N    N    N
 11      N    N    N         N    N    N         N    N    N         0    5    4
 12      0    3    4         2    3    3         1    2    3         0    1    4
 13      N    N    N         N    N    N         N    N    N         N    N    N
 14      N    N    N         N    N    N         0    4    4         0    3    4
 15      N    N    N         N    N    N         0    2    4         0    3    4
 16      0    4    4         0    1    4         3    4    4         0    4    4
 17      0    4    4         0    4    4         0    4    4         0    3    4
 18      0    3    4         0    4    4         0    4    4         0    4    4
 19      0    4    4         0    4    4         1    4    4         2    4    4
 20      1    4    4         1    4    4         2    4    4         0    3    4
 21      0    2    4         0    1    4         N    N    N         0    1    3
 22      0    2    3         0    4    4         0    3    4         0    5    4
 23      0    2    4         0    3    4         0    1    4         0    1    4
 24      0    4    4         0    3    4         0    3    4         0    3    4
 25      0    3    4         0    3    4         N    N    N         0    3    4
 26      0    3    4         0    3    4         N    N    N         N    N    N
 27      N    N    N         N    N    N         N    N    N         0    2    4
 28      0    2    4         0    2    4         1    3    4         N    N    N
 29      0    2    4         0    2    4         3    4    4         3    4    4
 30      0    1    4         0    1    4         3    5    4         0    1    4
 31      0    2    4         0    5    4         0    5    4         0    3    4

************************ SECOND INVERSION *****************************************
       0000-0600 MST       0601-1200 MST       1201-1800 MST       1801-2400 MST
DAY    BASE TOP  TYPE      BASE  TOP  TYPE     BASE  TOP  TYPE     BASE  TOP  TYPE
       (100M)(100M) *      (100M)(100M) *      (100M)(100M) *      (100M)(100M) *

  1      N    N    N         N    N    N         N    N    N         N    N    N
  2      N    N    N         N    N    N         N    N    N         N    N    N
  3      N    N    N         N    N    N         N    N    N         N    N    N
  4      N    N    N         N    N    N         N    N    N         N    N    N
  5      N    N    N         N    N    N         N    N    N         N    N    N
  6      N    N    N         N    N    N         N    N    N         4    5    4
  7      4    5    4         N    N    N         N    N    N         4    5    4
  8      N    N    N         N    N    N         N    N    N         3    5    4
  9      4    5    4         N    N    N         N    N    N         N    N    N
 10      N    N    N         N    N    N         N    N    N         N    N    N
 11      N    N    N         N    N    N         N    N    N         N    N    N
 12      N    N    N         N    N    N         4    5    4         4    5    4
 13      N    N    N         N    N    N         N    N    N         N    N    N
 14      N    N    N         N    N    N         N    N    N         N    N    N
 15      N    N    N         N    N    N         N    N    N         N    N    N
 16      N    N    N         2    4    4         N    N    N         N    N    N
 17      N    N    N         N    N    N         N    N    N         N    N    N
 18      N    N    N         N    N    N         N    N    N         N    N    N
 19      N    N    N         N    N    N         N    N    N         5    6    4
 20      N    N    N         N    N    N         5    6    4         4    5    4
 21      3    4    4         N    N    N         N    N    N         N    N    N
 22      N    N    N         N    N    N         N    N    N         N    N    N
 23      N    N    N         N    N    N         2    4    4         2    4    4
 24      N    N    N         4    5    4         N    N    N         N    N    N
 25      N    N    N         N    N    N         N    N    N         N    N    N
 26      N    N    N         N    N    N         N    N    N         N    N    N
 27      N    N    N         N    N    N         N    N    N         N    N    N
 28      3    4    4         3    4    4         N    N    N         N    N    N
 29      5    6    4         5    6    4         N    N    N         N    N    N
 30      4    5    4         5    6    4         N    N    N         N    N    N
 31      3    4    4         N    N    N         N    N    N         N    N    N

   NOTE:   FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
                     4=RADIATION (LAMINAR ECHO) 5=UNKNOWN
           N=NO INVERSION M=MISSING DATA OR UNKNOWN
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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                          MONTH OF JANUARY  1979

         ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS             INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100     200     300     400     500     600     700     800     900     TOTAL

---TIME    0- 600 MST ----------------------------------------------------------------------------

  001-100     1      0       0       0       0       0       0       0       0       0         1
  101-300    16      1       1       0       0       0       0       0       0       0        18
  301-500     7      0       0       0       0       0       0       0       0       0         7
  501-900     0      0       0       0       0       0       0       0       0       0         0
NO INVERSION                                                                                   5

  TOTAL      24      1       1       0       0       0       0       0       0       0        31
---TIME  601-1200 MST ----------------------------------------------------------------------------

  001-100     3      0       1       0       0       0       0       0       0       0         4
  101-300     8      2       0       0       0       0       0       0       0       0        10
  301-500    12      0       0       0       0       0       0       0       0       0        12
  501-900     0      0       0       0       0       0       0       0       0       0         0
NO INVERSION                                                                                   5

  TOTAL      23      2       1       0       0       0       0       0       0       0        31
---TIME 1201-1800 MST ----------------------------------------------------------------------------

  001-100     1      1       1       2       0       0       0       0       0       0         5
  101-300     7      2       3       1       0       0       0       0       0       0        13
  301-500     5      1       0       0       0       0       0       0       0       0         6
  501-900     0      0       0       0       0       0       0       0       0       0         0
NO INVERSION                                                                                   7

  TOTAL      13      4       4       3       0       0       0       0       0       0        31
---TIME 1801-2400 MST ----------------------------------------------------------------------------

  001-100     5      0       0       1       1       0       0       0       0       0         7
  101-300    14      0       1       0       0       0       0       0       0       0        15
  301-500     5      0       0       0       0       0       0       0       0       0         5
  501-900     0      0       0       0       0       0       0       0       0       0         0
NO INVERSION                                                                                   4

  TOTAL      24      0       1       1       1       0       0       0       0       0        31

----------------- FREQUENCY SUMMARY FOR FIRST INVERSION ----------------------------------------

  001-100    10      1       2       3       1       0       0       0       0       0        17
  101-300    45      5       5       1       0       0       0       0       0       0        56
  301-500    29      1       0       0       0       0       0       0       0       0        30
  501-900     0      0       0       0       0       0       0       0       0       0         0
NO INVERSION                                                                                  21

  TOTAL      84      7       7       4       1       0       0       0       0       0       124
```

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                          ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                        MONTH OF JANUARY  1979

       ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL
---TIME    0- 600 MST -------------------------------------------------------------------

 001-100     0      0      0      3      3      1      0      0      0      0       7
 101-300     0      0      0      0      0      0      0      0      0      0       0
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        24

  TOTAL      0      0      0      3      3      1      0      0      0      0      31
---TIME  601-1200 MST -------------------------------------------------------------------

 001-100     0      0      0      1      1      2      0      0      0      0       4
 101-300     0      0      1      0      0      0      0      0      0      0       1
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        26

  TOTAL      0      0      1      1      1      2      0      0      0      0      31
---TIME 1201-1800 MST -------------------------------------------------------------------

 001-100     0      0      0      0      1      1      0      0      0      0       2
 101-300     0      0      1      0      0      0      0      0      0      0       1
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        28

  TOTAL      0      0      1      0      1      1      0      0      0      0      31
---TIME 1801-2400 MST -------------------------------------------------------------------

 001-100     0      0      0      0      4      1      0      0      0      0       5
 101-300     0      0      1      1      0      0      0      0      0      0       2
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        24

  TOTAL      0      0      1      1      4      1      0      0      0      0      31

------------------ FREQUENCY SUMMARY FOR SECOND INVERSION ----------------------

 001-100     0      0      0      4      9      5      0      0      0      0      18
 101-300     0      0      3      1      0      0      0      0      0      0       4
 301-500     0      0      0      0      0      0      0      0      0      0       0
 501-900     0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                       102

  TOTAL      0      0      3      5      9      5      0      0      0      0     124
```

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF JANUARY 1979

********* TWO HOUR STABILITY ANALYSIS *************************

DAY	02	04	06	08	10	12	14	16	18	20	22	24
	HOUR											
1	F	F	F	F	E	E	E	E	E	E	E	E
2	E	D	D	D	D	D	D	D	D	F	F	F
3	F	F	F	E	E	D	D	D	D	E	E	E
4	E	E	E	F	F	D	D	D	F	F	F	F
5	E	F	F	E	E	E	F	D	D	F	F	F
6	F	F	F	F	F	F	F	D	D	E	E	E
7	E	E	E	E	F	F	F	F	F	F	F	F
8	F	D	D	D	D	D	D	D	F	F	F	F
9	F	E	E	E	D	D	D	B	D	D	D	D
10	D	D	D	D	D	E	D	D	D	D	D	D
11	D	D	D	D	D	D	M	M	E	D	D	D
12	D	D	D	D	D	D	D	D	E	D	D	D
13	D	D	D	D	D	D	D	M	M	M	M	M
14	M	M	M	M	E	E	E	E	E	D	D	D
15	D	D	D	D	D	D	E	D	E	F	D	D
16	D	D	D	D	D	D	D	D	D	E	D	D
17	D	D	D	D	D	D	F	F	F	F	F	F
18	E	E	D	D	D	D	D	D	F	E	E	E
19	D	D	D	D	D	D	D	D	D	D	D	D
20	D	D	D	D	D	D	D	D	D	D	E	D
21	D	D	D	D	D	D	D	D	D	E	E	E
22	E	F	F	F	E	E	E	E	D	D	D	E
23	E	E	E	E	E	D	D	D	E	E	E	E
24	D	D	D	D	D	D	F	E	E	E	E	E
25	E	F	F	F	D	F	D	D	D	E	E	E
26	E	E	E	E	E	D	D	M	M	M	M	M
27	D	D	D	D	D	D	M	D	D	E	D	F
28	E	E	E	E	E	E	D	D	D	D	D	E
29	D	D	D	D	D	D	D	D	D	D	D	D
30	D	E	D	E	E	D	D	D	D	D	E	E
31	E	E	E	E	E	E	E	E	E	E	E	E

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.0 % B= 0.3 % C= 0.0 % D=50.8 % E=28.2 % F=16.1 %

U= 0.0 % M= 4.6 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF FEBRUARY 1979

*********************** FIRST INVERSION ***

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	3	4	4	0	3	4	0	2	4	0	2	4
2	0	2	4	0	4	4	0	3	4	0	2	4
3	0	3	4	0	3	4	N	N	N	N	N	N
4	N	N	N	N	N	N	0	6	4	0	5	4
5	0	4	3	0	2	3	N	N	N	0	1	3
6	0	2	3	0	2	3	2	3	3	0	3	3
7	0	2	3	0	2	3	N	N	N	0	1	4
8	0	3	4	0	4	4	2	4	4	0	1	4
9	2	3	4	2	3	4	0	2	3	0	2	3
10	0	2	3	0	3	3	0	2	3	0	2	3
11	0	2	3	0	2	3	0	2	4	0	3	4
12	0	2	3	0	3	3	0	2	3	0	2	4
13	0	3	3	0	2	3	0	2	3	0	2	3
14	M	M	M	M	M	M	M	M	M	M	M	M
15	M	M	M	M	M	M	M	M	M	M	M	M
16	M	M	M	M	M	M	M	M	M	M	M	M
17	M	M	M	M	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M

*********************** SECOND INVERSION ***

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	4	5	4	3	4	4
3	N	N	N	N	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	2	4	4
9	4	5	4	4	5	4	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	N	N	N	N	N	N	N	N	N	N	N	N
13	N	N	N	3	4	4	N	N	N	N	N	N
14	M	M	M	M	M	M	M	M	M	M	M	M
15	M	M	M	M	M	M	M	M	M	M	M	M
16	M	M	M	M	M	M	M	M	M	M	M	M
17	M	M	M	M	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M

NOTE: FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                            ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                        MONTH OF FEBRUARY 1979

      ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL
---TIME    0- 600 MST ----------------------------------------------------------------

 001-100     0      0      1      1      0      0      0      0      0      0        2
 101-300     9      0      0      0      0      0      0      0      0      0        9
 301-500     1      0      0      0      0      0      0      0      0      0        1
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        1

  TOTAL     10      0      1      1      0      0      0      0      0      0       13
---TIME  601-1200 MST ----------------------------------------------------------------

 001-100     0      0      1      0      0      0      0      0      0      0        1
 101-300     9      0      0      0      0      0      0      0      0      0        9
 301-500     2      0      0      0      0      0      0      0      0      0        2
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        1

  TOTAL     11      0      1      0      0      0      0      0      0      0       13
---TIME 1201-1800 MST ----------------------------------------------------------------

 001-100     0      0      1      0      0      0      0      0      0      0        1
 101-300     7      0      1      0      0      0      0      0      0      0        8
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     1      0      0      0      0      0      0      0      0      0        1
NO INVERSION                                                                        3

  TOTAL      8      0      2      0      0      0      0      0      0      0       13
---TIME 1801-2400 MST ----------------------------------------------------------------

 001-100     3      0      0      0      0      0      0      0      0      0        3
 101-300     8      0      0      0      0      0      0      0      0      0        8
 301-500     1      0      0      0      0      0      0      0      0      0        1
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        1

  TOTAL     12      0      0      0      0      0      0      0      0      0       13


------------------ FREQUENCY SUMMARY FOR FIRST INVERSION -----------------------------

 001-100     3      0      3      1      0      0      0      0      0      0        7
 101-300    33      0      1      0      0      0      0      0      0      0       34
 301-500     4      0      0      0      0      0      0      0      0      0        4
 501-900     1      0      0      0      0      0      0      0      0      0        1
NO INVERSION                                                                        6

  TOTAL     41      0      4      1      0      0      0      0      0      0       52
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                              ACOUSTIC RADAR ANALYSIS
FLATHEAD ENVIRONMENTAL STUDY                         MONTH OF FEBRUARY 1979
         ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******
THICKNESS             INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900   TOTAL
---TIME    0- 600 MST -------------------------------------------------------------------
 001-100      0      0      0      0      1      0      0      0      0      0      1
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       12

   TOTAL      0      0      0      0      1      0      0      0      0      0     13
---TIME  601-1200 MST -------------------------------------------------------------------
 001-100      0      0      0      1      1      0      0      0      0      0      2
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       11

   TOTAL      0      0      0      1      1      0      0      0      0      0     13
---TIME 1201-1800 MST -------------------------------------------------------------------
 001-100      0      0      0      0      1      0      0      0      0      0      1
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       12

   TOTAL      0      0      0      0      1      0      0      0      0      0     13
---TIME 1801-2400 MST -------------------------------------------------------------------
 001-100      0      0      0      1      0      0      0      0      0      0      1
 101-300      0      0      1      0      0      0      0      0      0      0      1
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       11

   TOTAL      0      0      1      1      0      0      0      0      0      0     13

------------------ FREQUENCY SUMMARY FOR SECOND INVERSION ----------------------

 001-100      0      0      0      2      3      0      0      0      0      0      5
 101-300      0      0      1      0      0      0      0      0      0      0      1
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       46

   TOTAL      0      0      1      2      3      0      0      0      0      0     52
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                         ACOUSTIC RADAR ANALYSIS
FLATHEAD ENVIRONMENTAL STUDY                     MONTH OF FEBRUARY 1979

********* TWO HOUR STABILITY ANALYSIS ***************************

         -------------------- HOUR -----------------------------
DAY     02    04    06    08    10    12    14    16    18    20    22    24
  1      D     D     D     D     E     D     D     F     F     E     E     E
  2      D     D     D     D     D     E     D     D     D     D     D     D
  3      D     D     D     D     D     D     D     D     D     D     D     D
  4      D     D     D     D     D     D     D     E     D     D     D     E
  5      D     D     D     D     D     D     D     D     E     E     E     E
  6      E     E     E     E     D     D     D     D     D     E     D     D
  7      D     D     D     F     D     D     D     D     E     F     F     F
  8      F     F     F     F     E     D     D     D     D     E     D     D
  9      D     D     D     D     D     E     D     D     D     D     D     D
 10      D     E     E     E     D     D     D     D     D     D     D     D
 11      D     D     E     E     E     E     E     D     D     E     D     D
 12      D     D     D     D     D     D     D     E     E     D     D     D
 13      D     D     D     D     D     D     E     E     E     E     E     M
 14      M     M     M     M     M     M     M     M     M     M     M     M
 15      M     M     M     M     M     M     M     M     M     M     M     M
 16      M     M     M     M     M     M     M     M     M     M     M     M
 17      M     M     M     M     M     M     M     M     M     M     M     M
 18      M     M     M     M     M     M     M     M     M     M     M     M
 19      M     M     M     M     M     M     M     M     M     M     M     M
 20      M     M     M     M     M     M     M     M     M     M     M     M
 21      M     M     M     M     M     M     M     M     M     M     M     M
 22      M     M     M     M     M     M     M     M     M     M     M     M
 23      M     M     M     M     M     M     M     M     M     M     M     M
 24      M     M     M     M     M     M     M     M     M     M     M     M
 25      M     M     M     M     M     M     M     M     M     M     M     M
 26      M     M     M     M     M     M     M     M     M     M     M     M
 27      M     M     M     M     M     M     M     M     M     M     M     M
 28      M     M     M     M     M     M     M     M     M     M     M     M
              PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY
    A= 0.0 %  B= 0.0 %  C= 0.0 %  D=32.4 %  E=10.7 %  F= 3.0 %
    U= 0.0 %  M=53.9 %
NOTE: U=UNKNOWN M=MISSING DATA
      CLOUD COVER CONDITIONS USED FROM NWS STATION  AT KALISPELL
      WIND DATA USED FROM NWS STATION AT KALISPELL
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ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF MARCH 1979

************************ FIRST INVERSION **

DAY	0000-0600 MST BASE (100M)	 TOP (100M)	 TYPE *	0601-1200 MST BASE (100M)	 TOP (100M)	 TYPE *	1201-1800 MST BASE (100M)	 TOP (100M)	 TYPE *	1801-2400 MST BASE (100M)	 TOP (100M)	 TYPE *
1	M	M	M	M	M	M	M	M	M	M	M	M
2	M	M	M	M	M	M	M	M	M	M	M	M
3	M	M	M	M	M	M	M	M	M	M	M	M
4	M	M	M	M	M	M	M	M	M	M	M	M
5	M	M	M	M	M	M	M	M	M	M	M	M
6	M	M	M	M	M	M	M	M	M	M	M	M
7	M	M	M	M	M	M	M	M	M	M	M	M
8	M	M	M	M	M	M	M	M	M	M	M	M
9	M	M	M	M	M	M	M	M	M	M	M	M
10	M	M	M	M	M	M	M	M	M	M	M	M
11	M	M	M	M	M	M	M	M	M	M	M	M
12	M	M	M	M	M	M	M	M	M	M	M	M
13	M	M	M	M	M	M	M	M	M	M	M	M
14	M	M	M	M	M	M	M	M	M	M	M	M
15	M	M	M	M	M	M	M	M	M	M	M	M
16	M	M	M	M	M	M	M	M	M	M	M	M
17	M	M	M	M	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	N	N	N	0	2	4
24	0	2	4	0	2	4	N	N	N	N	N	N
25	2	3	3	N	N	N	N	N	N	1	2	3
26	1	2	3	3	4	3	3	4	3	3	4	3
27	3	4	3	N	N	N	N	N	N	N	N	N
28	2	3	3	N	N	N	N	N	N	0	3	4
29	0	4	4	0	3	4	N	N	N	0	2	4
30	0	1	4	N	N	N	N	N	N	0	1	4
31	0	1	4	N	N	N	N	N	N	N	N	N

************************ SECOND INVERSION **

DAY	0000-0600 MST BASE (100M)	 TOP (100M)	 TYPE *	0601-1200 MST BASE (100M)	 TOP (100M)	 TYPE *	1201-1800 MST BASE (100M)	 TOP (100M)	 TYPE *	1801-2400 MST BASE (100M)	 TOP (100M)	 TYPE *
1	M	M	M	M	M	M	M	M	M	M	M	M
2	M	M	M	M	M	M	M	M	M	M	M	M
3	M	M	M	M	M	M	M	M	M	M	M	M
4	M	M	M	M	M	M	M	M	M	M	M	M
5	M	M	M	M	M	M	M	M	M	M	M	M
6	M	M	M	M	M	M	M	M	M	M	M	M
7	M	M	M	M	M	M	M	M	M	M	M	M
8	M	M	M	M	M	M	M	M	M	M	M	M
9	M	M	M	M	M	M	M	M	M	M	M	M
10	M	M	M	M	M	M	M	M	M	M	M	M
11	M	M	M	M	M	M	M	M	M	M	M	M
12	M	M	M	M	M	M	M	M	M	M	M	M
13	M	M	M	M	M	M	M	M	M	M	M	M
14	M	M	M	M	M	M	M	M	M	M	M	M
15	M	M	M	M	M	M	M	M	M	M	M	M
16	M	M	M	M	M	M	M	M	M	M	M	M
17	M	M	M	M	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	N	N	N	N	N	N
24	3	4	4	3	4	4	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N
31	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                          ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                         MONTH OF MARCH     1979

       ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS            INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100     200     300     400     500     600     700     800     900    TOTAL

---TIME     0- 600 MST -----------------------------------------------------------------------

 001-100     2       1       2       1       0       0       0       0       0       0        6
 101-300     1       0       0       0       0       0       0       0       0       0        1
 301-500     1       0       0       0       0       0       0       0       0       0        1
 501-900     0       0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                  0

  TOTAL      4       1       2       1       0       0       0       0       0       0        8

---TIME   601-1200 MST -----------------------------------------------------------------------

 001-100     0       0       0       1       0       0       0       0       0       0        1
 101-300     2       0       0       0       0       0       0       0       0       0        2
 301-500     0       0       0       0       0       0       0       0       0       0        0
 501-900     0       0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                  5

  TOTAL      2       0       0       1       0       0       0       0       0       0        8

---TIME 1201-1800 MST ------------------------------------------------------------------------

 001-100     0       0       0       1       0       0       0       0       0       0        1
 101-300     0       0       0       0       0       0       0       0       0       0        0
 301-500     0       0       0       0       0       0       0       0       0       0        0
 501-900     0       0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                  8

  TOTAL      0       0       0       1       0       0       0       0       0       0        9

---TIME 1801-2400 MST ------------------------------------------------------------------------

 001-100     1       1       0       1       0       0       0       0       0       0        3
 101-300     3       0       0       0       0       0       0       0       0       0        3
 301-500     0       0       0       0       0       0       0       0       0       0        0
 501-900     0       0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                  3

  TOTAL      4       1       0       1       0       0       0       0       0       0        9


------------------ FREQUENCY SUMMARY FOR FIRST INVERSION -------------------------------------

 001-100     3       2       2       4       0       0       0       0       0       0       11
 101-300     6       0       0       0       0       0       0       0       0       0        6
 301-500     1       0       0       0       0       0       0       0       0       0        1
 501-900     0       0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                 16

  TOTAL     10       2       2       4       0       0       0       0       0       0       34
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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                         MONTH OF MARCH    1979

          ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST -------------------------------------------------------------------

 001-100      0      0      0      1      0      0      0      0      0      0      1
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                         7

  TOTAL       0      0      0      1      0      0      0      0      0      0      8
---TIME  601-1200 MST -------------------------------------------------------------------

 001-100      0      0      0      1      0      0      0      0      0      0      1
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                         7

  TOTAL       0      0      0      1      0      0      0      0      0      0      8
---TIME 1201-1800 MST -------------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                         9

  TOTAL       0      0      0      0      0      0      0      0      0      0      9
---TIME 1801-2400 MST -------------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                         9

  TOTAL       0      0      0      0      0      0      0      0      0      0      9

------------------ FREQUENCY SUMMARY FOR SECOND INVERSION -----------------------

 001-100      0      0      0      2      0      0      0      0      0      0      2
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                        32

  TOTAL       0      0      0      2      0      0      0      0      0      0     34
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                         ACOUSTIC RADAR ANALYSIS
     FLATHEAD ENVIRONMENTAL STUDY                    MONTH OF MARCH     1979

     ********* TWO HOUR STABILITY ANALYSIS *************************
              -------------------- HOUR ------------------------------
     DAY    02     04     06     08     10     12     14     16     18     20     22     24
      1      M      M      M      M      M      M      M      M      M      M      M      M
      2      M      M      M      M      M      M      M      M      M      M      M      M
      3      M      M      M      M      M      M      M      M      M      M      M      M
      4      M      M      M      M      M      M      M      M      M      M      M      M
      5      M      M      M      M      M      M      M      M      M      M      M      M
      6      M      M      M      M      M      M      M      M      M      M      M      M
      7      M      M      M      M      M      M      M      M      M      M      M      M
      8      M      M      M      M      M      M      M      M      M      M      M      M
      9      M      M      M      M      M      M      M      M      M      M      M      M
     10      M      M      M      M      M      M      M      M      M      M      M      M
     11      M      M      M      M      M      M      M      M      M      M      M      M
     12      M      M      M      M      M      M      M      M      M      M      M      M
     13      M      M      M      M      M      M      M      M      M      M      M      M
     14      M      M      M      M      M      M      M      M      M      M      M      M
     15      M      M      M      M      M      M      M      M      M      M      M      M
     16      M      M      M      M      M      M      M      M      M      M      M      M
     17      M      M      M      M      M      M      M      M      M      M      M      M
     18      M      M      M      M      M      M      M      M      M      M      M      M
     19      M      M      M      M      M      M      M      M      M      M      M      M
     20      M      M      M      M      M      M      M      M      M      M      M      M
     21      M      M      M      M      M      M      M      M      M      M      M      M
     22      M      M      M      M      M      M      M      M      M      M      M      M
     23      M      M      M      M      M      M      M      M      C      E      D      M
     24      F      D      D      E      D      D      C      C      D      D      D      D
     25      D      D      D      D      D      D      C      C      D      D      D      D
     26      D      D      D      D      D      D      D      D      D      D      D      D
     27      D      D      D      D      D      D      D      C      D      D      D      D
     28      D      D      D      D      D      D      C      D      D      E      D      D
     29      D      D      D      D      D      D      D      D      D      E      E      E
     30      E      E      E      E      D      D      D      D      D      E      D      D
     31      D      D      E      D      D      C      D      D      D      D      D      D
             PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY
         A= 0.0 %  B= 0.0 %  C= 2.2 %  D=20.4 %  E= 3.8 %  F= 0.3 %
         U= 0.0 %  M=73.4 %
     NOTE: U=UNKNOWN M=MISSING DATA
           CLOUD COVER CONDITIONS USED FROM NWS STATION  AT KALISPELL
           WIND DATA USED FROM NWS STATION AT KALISPELL
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ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF MAY 1979

********************** FIRST INVERSION **********************

DAY	0000-0600 MST BASE (100M)	TOP (100M)	TYPE *	0601-1200 MST BASE (100M)	TOP (100M)	TYPE *	1201-1800 MST BASE (100M)	TOP (100M)	TYPE *	1801-2400 MST BASE (100M)	TOP (100M)	TYPE *
1	0	3	4	0	2	4	N	N	N	0	1	4
2	0	2	4	N	N	N	N	N	N	0	2	4
3	0	2	4	N	N	N	N	N	N	0	1	3
4	0	2	3	0	2	3	N	N	N	0	3	3
5	0	3	3	N	N	N	N	N	N	0	2	4
6	0	4	4	1	4	4	N	N	N	0	1	3
7	0	2	4	N	N	N	N	N	N	0	2	4
8	0	3	4	1	4	4	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	0	2	3
10	0	2	3	0	1	3	0	1	3	0	2	4
11	0	2	4	0	4	4	N	N	N	0	2	4
12	0	2	4	N	N	N	N	N	N	0	3	4
13	0	3	4	0	3	4	N	N	N	N	N	N
14	0	2	3	N	N	N	N	N	N	0	2	4
15	0	3	4	0	1	4	N	N	N	0	4	4
16	0	4	4	2	5	4	N	N	N	0	3	4
17	0	3	3	N	N	N	N	N	N	0	2	4
18	0	2	4	1	3	4	N	N	N	0	2	4
19	0	2	4	N	N	N	N	N	N	N	N	N
20	0	2	3	N	N	N	N	N	N	0	2	4
21	0	3	4	N	N	N	N	N	N	0	2	4
22	2	3	3	N	N	N	N	N	N	N	N	N
23	N	N	N	N	N	N	N	N	N	0	2	4
24	0	2	4	N	N	N	N	N	N	M	M	M
25	0	2	4	N	N	N	N	N	N	0	2	4
26	0	5	4	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	0	2	4
28	0	2	4	N	N	N	N	N	N	0	2	4
29	N	N	N	N	N	N	N	N	N	0	2	4
30	0	2	4	4	5	4	N	N	N	0	2	4
31	0	3	4	3	5	4	N	N	N	0	2	4

********************** SECOND INVERSION **********************

DAY	0000-0600 MST BASE (100M)	TOP (100M)	TYPE *	0601-1200 MST BASE (100M)	TOP (100M)	TYPE *	1201-1800 MST BASE (100M)	TOP (100M)	TYPE *	1801-2400 MST BASE (100M)	TOP (100M)	TYPE *
1	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	N	N	N	N	N	N
3	N	N	N	N	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	N	N	N	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	N	N	N
15	N	N	N	3	4	4	N	N	N	N	N	N
16	5	6	4	N	N	N	N	N	N	N	N	N
17	N	N	N	N	N	N	N	N	N	N	N	N
18	N	N	N	N	N	N	N	N	N	N	N	N
19	N	N	N	N	N	N	N	N	N	N	N	N
20	N	N	N	N	N	N	N	N	N	N	N	N
21	N	N	N	N	N	N	N	N	N	N	N	N
22	N	N	N	N	N	N	N	N	N	N	N	N
23	N	N	N	N	N	N	N	N	N	N	N	N
24	N	N	N	N	N	N	N	N	N	M	M	M
25	N	N	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N	N	N
30	4	5	4	N	N	N	N	N	N	N	N	N
31	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF MAY 1979

******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS (METERS)	INVERSION BASE HEIGHT (IN METERS) SFC	100	200	300	400	500	600	700	800	900	TOTAL
---TIME 0- 600 MST											
001-100	0	0	1	0	0	0	0	0	0	0	1
101-300	23	0	0	0	0	0	0	0	0	0	23
301-500	3	0	0	0	0	0	0	0	0	0	3
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											4
TOTAL	26	0	1	0	0	0	0	0	0	0	31
---TIME 601-1200 MST											
001-100	2	0	0	0	1	0	0	0	0	0	3
101-300	3	3	1	1	0	0	0	0	0	0	8
301-500	1	0	0	0	0	0	0	0	0	0	1
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											19
TOTAL	6	3	1	1	1	0	0	0	0	0	31
---TIME 1201-1800 MST											
001-100	1	0	0	0	0	0	0	0	0	0	1
101-300	0	0	0	0	0	0	0	0	0	0	0
301-500	0	0	0	0	0	0	0	0	0	0	0
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											30
TOTAL	1	0	0	0	0	0	0	0	0	0	31
---TIME 1801-2400 MST											
001-100	3	0	0	0	0	0	0	0	0	0	3
101-300	21	0	0	0	0	0	0	0	0	0	21
301-500	1	0	0	0	0	0	0	0	0	0	1
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											5
TOTAL	25	0	0	0	0	0	0	0	0	0	30
---FREQUENCY SUMMARY FOR FIRST INVERSION---											
001-100	6	0	1	0	1	0	0	0	0	0	8
101-300	47	3	1	1	0	0	0	0	0	0	52
301-500	5	0	0	0	0	0	0	0	0	0	5
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											58
TOTAL	58	3	2	1	1	0	0	0	0	0	123

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                         ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                MONTH OF MAY       1979

        ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
(METERS)    SFC   100   200   300   400   500   600   700   800   900    TOTAL

---TIME     0- 600 MST ------------------------------------------------------------

 001-100       0     0     0     0     1     1     0     0     0     0      2
 101-300       0     0     0     0     0     0     0     0     0     0      0
 301-500       0     0     0     0     0     0     0     0     0     0      0
 501-900       0     0     0     0     0     0     0     0     0     0      0
NO INVERSION                                                               29

  TOTAL        0     0     0     0     1     1     0     0     0     0     31

---TIME  601-1200 MST ------------------------------------------------------------

 001-100       0     0     0     1     0     0     0     0     0     0      1
 101-300       0     0     0     0     0     0     0     0     0     0      0
 301-500       0     0     0     0     0     0     0     0     0     0      0
 501-900       0     0     0     0     0     0     0     0     0     0      0
NO INVERSION                                                               30

  TOTAL        0     0     0     1     0     0     0     0     0     0     31

---TIME 1201-1800 MST ------------------------------------------------------------

 001-100       0     0     0     0     0     0     0     0     0     0      0
 101-300       0     0     0     0     0     0     0     0     0     0      0
 301-500       0     0     0     0     0     0     0     0     0     0      0
 501-900       0     0     0     0     0     0     0     0     0     0      0
NO INVERSION                                                               31

  TOTAL        0     0     0     0     0     0     0     0     0     0     31

---TIME 1801-2400 MST ------------------------------------------------------------

 001-100       0     0     0     0     0     0     0     0     0     0      0
 101-300       0     0     0     0     0     0     0     0     0     0      0
 301-500       0     0     0     0     0     0     0     0     0     0      0
 501-900       0     0     0     0     0     0     0     0     0     0      0
NO INVERSION                                                               30

  TOTAL        0     0     0     0     0     0     0     0     0     0     30


----------------- FREQUENCY SUMMARY FOR SECOND INVERSION ----------------------

 001-100       0     0     0     1     1     1     0     0     0     0      3
 101-300       0     0     0     0     0     0     0     0     0     0      0
 301-500       0     0     0     0     0     0     0     0     0     0      0
 501-900       0     0     0     0     0     0     0     0     0     0      0
NO INVERSION                                                              120

  TOTAL        0     0     0     1     1     1     0     0     0     0    123
```

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                         ACOUSTIC RADAR ANALYSIS
FLATHEAD ENVIRONMENTAL STUDY                    MONTH OF MAY       1979

********* TWO HOUR STABILITY ANALYSIS ******************************
          --------------------- HOUR ---------------------------------
DAY   02   04   06   08   10   12   14   16   18   20   22   24
  1    D    E    D    E    D    D    C    B    D    D    F    F
  2    F    E    D    D    D    C    C    B    D    D    E    D
  3    D    D    F    D    D    C    C    C    D    D    E    E
  4    E    E    D    D    D    D    D    D    D    D    E    E
  5    E    E    E    D    D    C    C    C    D    D    E    E
  6    E    E    E    D    C    C    C    D    D    E    D    D
  7    D    E    D    D    D    D    D    C    C    D    E    E
  8    E    E    E    D    C    C    C    C    D    D    D    D
  9    D    D    F    D    D    D    D    D    D    D    E    D
 10    D    D    D    D    D    D    D    D    D    D    E    E
 11    D    F    F    F    D    C    C    D    D    D    F    F
 12    F    F    F    D    D    C    C    D    D    D    E    D
 13    D    E    D    F    D    D    D    D    D    D    D    F
 14    F    F    F    D    D    D    C    C    C    D    E    E
 15    E    D    D    D    D    C    D    D    D    E    F    F
 16    E    E    D    D    D    D    C    C    D    F    D    D
 17    D    F    D    D    D    D    D    C    D    D    E    E
 18    F    E    E    D    D    C    C    C    D    D    E    D
 19    D    F    D    D    D    C    C    C    C    D    D    F
 20    D    F    F    D    D    D    D    D    C    D    E    E
 21    E    E    E    D    C    C    C    C    C    D    F    F
 22    D    D    D    D    D    D    D    D    D    D    D    D
 23    D    D    D    D    D    D    C    D    D    D    E    E
 24    E    E    E    D    D    C    C    M    M    M    M    M
 25    F    E    E    D    C    C    C    C    D    D    E    E
 26    F    F    D    D    C    B    C    D    D    D    D    D
 27    D    D    D    D    C    C    C    C    C    D    F    F
 28    F    E    E    D    D    D    D    D    C    D    E    D
 29    D    D    E    D    C    B    D    D    C    D    F    F
 30    F    F    F    D    C    C    C    C    D    D    F    F
 31    E    E    E    D    C    C    C    C    C    D    E    E
              PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY
    A= 0.0 %  B= 1.1 %  C=18.0 %  D=51.1 %  E=17.2 %  F=11.3 %
    U= 0.0 %  M= 1.3 %
NOTE: U=UNKNOWN M=MISSING DATA
         CLOUD COVER CONDITIONS USED FROM NWS STATION  AT KALISPELL
         WIND DATA USED FROM NWS STATION AT KALISPELL
```

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF JUNE 1979

FIRST INVERSION

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	0	4	4	4	6	4	N	N	N	0	2	4
2	0	3	4	N	N	N	N	N	N	0	1	4
3	0	3	4	N	N	N	N	N	N	0	1	4
4	0	3	4	N	N	N	N	N	N	0	1	4
5	0	2	3	0	2	3	N	N	N	0	3	4
6	0	2	4	N	N	N	N	N	N	0	2	4
7	0	2	4	N	N	N	N	N	N	0	1	4
8	N	N	N	N	N	N	N	N	N	0	2	4
9	0	3	4	N	N	N	N	N	N	0	2	4
10	0	4	4	2	4	4	N	N	N	0	2	4
11	0	5	4	N	N	N	N	N	N	0	3	4
12	0	3	4	3	4	4	N	N	N	0	1	4
13	0	4	4	N	N	N	N	N	N	0	1	4
14	0	3	4	N	N	N	N	N	N	0	1	4
15	0	3	4	N	N	N	N	N	N	0	1	3
16	0	1	3	N	N	N	N	N	N	0	1	3
17	0	1	3	N	N	N	N	N	N	0	1	4
18	0	2	4	2	5	4	4	5	4	0	3	4
19	0	2	4	0	2	4	3	5	4	0	1	4
20	0	4	4	N	N	N	N	N	N	0	2	4
21	0	4	4	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	M	M	M	M	M	M	M	M	M	M

SECOND INVERSION

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	5	6	4	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	N	N	N	N	N	N
3	N	N	N	N	N	N	N	N	N	N	N	N
4	4	5	4	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	4	5	4	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	N	N	N
15	N	N	N	N	N	N	N	N	N	N	N	N
16	2	4	3	N	N	N	N	N	N	N	N	N
17	N	N	N	N	N	N	N	N	N	N	N	N
18	N	N	N	N	N	N	N	N	N	N	N	N
19	4	5	4	N	N	N	N	N	N	N	N	N
20	N	N	N	N	N	N	N	N	N	N	N	N
21	N	N	N	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	M	M	M	M	M	M	M	M	M	M

NOTE: FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                                   ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                            MONTH OF JUNE     1979

          ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST -----------------------------------------------------------------

 001-100      2      0      0      0      0      0      0      0      0      0       2
 101-300     12      0      0      0      0      0      0      0      0      0      12
 301-500      6      0      0      0      0      0      0      0      0      0       6
 501-900      0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                         1

  TOTAL      20      0      0      0      0      0      0      0      0      0      21

---TIME  601-1200 MST -----------------------------------------------------------------

 001-100      0      0      0      1      0      0      0      0      0      0       1
 101-300      2      0      2      0      1      0      0      0      0      0       5
 301-500      0      0      0      0      0      0      0      0      0      0       0
 501-900      0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        14

  TOTAL       2      0      2      1      1      0      0      0      0      0      20

---TIME 1201-1800 MST -----------------------------------------------------------------

 001-100      0      0      0      0      1      0      0      0      0      0       1
 101-300      0      0      0      1      0      0      0      0      0      0       1
 301-500      0      0      0      0      0      0      0      0      0      0       0
 501-900      0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        18

  TOTAL       0      0      0      1      1      0      0      0      0      0      20

---TIME 1801-2400 MST -----------------------------------------------------------------

 001-100     11      0      0      0      0      0      0      0      0      0      11
 101-300      9      0      0      0      0      0      0      0      0      0       9
 301-500      0      0      0      0      0      0      0      0      0      0       0
 501-900      0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                         0

  TOTAL      20      0      0      0      0      0      0      0      0      0      20


----------------- FREQUENCY SUMMARY FOR FIRST INVERSION --------------------------------

 001-100     13      0      0      1      1      0      0      0      0      0      15
 101-300     23      0      2      1      1      0      0      0      0      0      27
 301-500      6      0      0      0      0      0      0      0      0      0       6
 501-900      0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        33

  TOTAL      42      0      2      2      2      0      0      0      0      0      81
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                       ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                    MONTH OF JUNE      1979

       ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC     100     200     300     400     500     600     700     800     900     TOTAL
---TIME    0- 600 MST -----------------------------------------------------------------------------

 001-100       0       0       0       0       3       1       0       0       0       0       4
 101-300       0       0       1       0       0       0       0       0       0       0       1
 301-500       0       0       0       0       0       0       0       0       0       0       0
 501-900       0       0       0       0       0       0       0       0       0       0       0
NO INVERSION                                                                                  16

  TOTAL        0       0       1       0       3       1       0       0       0       0      21
---TIME  601-1200 MST -----------------------------------------------------------------------------

 001-100       0       0       0       0       0       0       0       0       0       0       0
 101-300       0       0       0       0       0       0       0       0       0       0       0
 301-500       0       0       0       0       0       0       0       0       0       0       0
 501-900       0       0       0       0       0       0       0       0       0       0       0
NO INVERSION                                                                                  20

  TOTAL        0       0       0       0       0       0       0       0       0       0      20
---TIME 1201-1800 MST -----------------------------------------------------------------------------

 001-100       0       0       0       0       0       0       0       0       0       0       0
 101-300       0       0       0       0       0       0       0       0       0       0       0
 301-500       0       0       0       0       0       0       0       0       0       0       0
 501-900       0       0       0       0       0       0       0       0       0       0       0
NO INVERSION                                                                                  20

  TOTAL        0       0       0       0       0       0       0       0       0       0      20
---TIME 1801-2400 MST -----------------------------------------------------------------------------

 001-100       0       0       0       0       0       0       0       0       0       0       0
 101-300       0       0       0       0       0       0       0       0       0       0       0
 301-500       0       0       0       0       0       0       0       0       0       0       0
 501-900       0       0       0       0       0       0       0       0       0       0       0
NO INVERSION                                                                                  20

  TOTAL        0       0       0       0       0       0       0       0       0       0      20


---------------- FREQUENCY SUMMARY FOR SECOND INVERSION -------------------

 001-100       0       0       0       0       3       1       0       0       0       0       4
 101-300       0       0       1       0       0       0       0       0       0       0       1
 301-500       0       0       0       0       0       0       0       0       0       0       0
 501-900       0       0       0       0       0       0       0       0       0       0       0
NO INVERSION                                                                                  76

  TOTAL        0       0       1       0       3       1       0       0       0       0      81
```

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF JUNE 1979

********* TWO HOUR STABILITY ANALYSIS *************************

	HOUR											
DAY	02	04	06	08	10	12	14	16	18	20	22	24
1	E	F	F	D	C	C	C	C	C	D	E	E
2	E	E	E	D	C	C	C	C	D	D	F	F
3	F	F	F	D	B	A	C	C	D	D	E	E
4	E	E	E	D	C	C	D	D	D	D	E	E
5	E	E	E	D	D	D	D	C	D	D	E	E
6	E	E	E	D	C	D	D	D	D	C	E	D
7	D	E	D	D	C	B	D	C	D	D	E	D
8	D	D	D	B	C	D	D	D	D	D	E	D
9	D	E	D	D	C	C	C	C	D	D	F	F
10	F	E	E	D	C	C	C	D	C	D	F	F
11	E	E	E	D	C	B	C	C	D	E	F	F
12	C	F	D	C	C	C	C	C	D	D	F	F
13	E	E	D	D	C	C	C	C	C	D	F	F
14	F	F	D	B	C	C	C	C	C	D	F	F
15	E	E	E	D	C	C	C	C	C	D	F	F
16	F	E	D	C	C	C	C	C	D	D	E	E
17	E	D	D	D	D	C	D	C	D	D	E	D
18	D	D	E	D	D	D	C	C	D	E	D	D
19	E	E	E	D	D	D	D	C	D	D	E	E
20	E	E	E	D	D	C	C	C	C	D	F	F
21	F	F	F	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	M	M	M	M	M	M	M	M	M	M

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.3 % B= 1.4 % C=17.8 % D=25.0 % E=14.4 % F= 8.6 %

U= 0.0 % M=32.5 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF AUGUST 1979

********************** FIRST INVERSION **********************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	M	M	M	M	M	M	M	M	M	M	M	M
2	M	M	M	M	M	M	M	M	M	M	M	M
3	M	M	M	M	M	M	M	M	M	M	M	M
4	M	M	M	M	M	M	M	M	M	M	M	M
5	M	M	M	M	M	M	M	M	M	M	M	M
6	M	M	M	M	M	M	M	M	M	M	M	M
7	N	N	N	N	N	N	N	N	N	0	2	4
8	0	4	4	1	3	4	N	N	N	0	2	4
9	0	2	4	N	N	N	N	N	N	0	2	4
10	0	3	4	N	N	N	N	N	N	0	3	4
11	0	5	4	2	4	4	N	N	N	N	N	N
12	1	3	3	N	N	N	N	N	N	0	1	3
13	0	2	3	N	N	N	N	N	N	N	N	N
14	0	1	3	N	N	N	N	N	N	0	2	4
15	0	5	4	1	3	4	N	N	N	0	2	4
16	0	5	4	N	N	N	N	N	N	0	3	4
17	0	6	4	3	5	4	N	N	N	0	2	4
18	0	3	4	1	3	4	N	N	N	0	1	4
19	0	3	4	2	4	4	N	N	N	0	3	4
20	0	5	4	2	4	4	N	N	N	0	3	4
21	0	6	4	2	5	4	N	N	N	0	4	4
22	M	M	M	M	M	M	M	M	M	M	M	M
23	0	5	4	3	5	4	N	N	N	0	2	4
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M
29	0	5	4	3	5	4	N	N	N	0	3	4
30	0	5	4	N	N	N	N	N	N	0	3	4
31	0	2	4	N	N	N	2	3	3	0	2	4

********************** SECOND INVERSION **********************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	M	M	M	M	M	M	M	M	M	M	M	M
2	M	M	M	M	M	M	M	M	M	M	M	M
3	M	M	M	M	M	M	M	M	M	M	M	M
4	M	M	M	M	M	M	M	M	M	M	M	M
5	M	M	M	M	M	M	M	M	M	M	M	M
6	M	M	M	M	M	M	M	M	M	M	M	M
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	N	N	N	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	N	N	N
15	N	N	N	N	N	N	N	N	N	N	N	N
16	N	N	N	N	N	N	N	N	N	N	N	N
17	N	N	N	N	N	N	N	N	N	N	N	N
18	N	N	N	N	N	N	N	N	N	N	N	N
19	N	N	N	N	N	N	N	N	N	N	N	N
20	N	N	N	N	N	N	N	N	N	N	N	N
21	N	N	N	N	N	N	N	N	N	N	N	N
22	M	M	M	M	M	M	M	M	M	M	M	M
23	N	N	N	N	N	N	N	N	N	N	N	N
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N
31	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                         ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                   MONTH OF AUGUST   1979

      ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS         INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME     0- 600 MST -----------------------------------------------------------------

 001-100      1      0      0      0      0      0      0      0      0      0       1
 101-300      6      1      0      0      0      0      0      0      0      0       7
 301-500      8      0      0      0      0      0      0      0      0      0       8
 501-900      2      0      0      0      0      0      0      0      0      0       2
NO INVERSION                                                                         1

  TOTAL      17      1      0      0      0      0      0      0      0      0      19

---TIME  601-1200 MST -----------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0       0
 101-300      0      3      4      3      0      0      0      0      0      0      10
 301-500      0      0      0      0      0      0      0      0      0      0       0
 501-900      0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                         9

  TOTAL       0      3      4      3      0      0      0      0      0      0      19

---TIME 1201-1800 MST -----------------------------------------------------------------

 001-100      0      0      1      0      0      0      0      0      0      0       1
 101-300      0      0      0      0      0      0      0      0      0      0       0
 301-500      0      0      0      0      0      0      0      0      0      0       0
 501-900      0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        18

  TOTAL       0      0      1      0      0      0      0      0      0      0      19

---TIME 1801-2400 MST -----------------------------------------------------------------

 001-100      2      0      0      0      0      0      0      0      0      0       2
 101-300     14      0      0      0      0      0      0      0      0      0      14
 301-500      1      0      0      0      0      0      0      0      0      0       1
 501-900      0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                         2

  TOTAL      17      0      0      0      0      0      0      0      0      0      19


----------------- FREQUENCY SUMMARY FOR FIRST INVERSION --------------------------------

 001-100      3      0      1      0      0      0      0      0      0      0       4
 101-300     20      4      4      3      0      0      0      0      0      0      31
 301-500      9      0      0      0      0      0      0      0      0      0       9
 501-900      2      0      0      0      0      0      0      0      0      0       2
NO INVERSION                                                                        30

  TOTAL      34      4      5      3      0      0      0      0      0      0      76
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                        ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                      MONTH OF AUGUST    1979

       ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME     0- 600 MST ----------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       19

  TOTAL       0      0      0      0      0      0      0      0      0      0     19

---TIME   601-1200 MST ----------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       19

  TOTAL       0      0      0      0      0      0      0      0      0      0     19

---TIME  1201-1800 MST ----------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       19

  TOTAL       0      0      0      0      0      0      0      0      0      0     19

---TIME  1801-2400 MST ----------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       19

  TOTAL       0      0      0      0      0      0      0      0      0      0     19


---------------- FREQUENCY SUMMARY FOR SECOND INVERSION ---------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       76

  TOTAL       0      0      0      0      0      0      0      0      0      0     76
```

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF AUGUST 1979

********* TWO HOUR STABILITY ANALYSIS **************************

	HOUR											
DAY	02	04	06	08	10	12	14	16	18	20	22	24
1	M	M	M	M	M	M	M	M	M	M	M	M
2	M	M	M	M	M	M	M	M	M	M	M	M
3	M	M	M	M	M	M	M	M	M	M	M	M
4	M	M	M	M	M	M	M	M	M	M	M	M
5	M	M	M	M	M	M	M	M	M	M	M	M
6	M	M	M	M	M	M	M	M	M	M	M	M
7	F	F	F	E	F	F	C	C	C	D	F	F
8	F	F	F	D	D	C	C	C	C	D	E	E
9	E	F	F	D	C	C	C	B	C	D	F	F
10	F	F	F	D	C	C	C	C	C	D	F	F
11	F	F	F	D	C	C	C	C	D	D	D	D
12	D	D	D	D	C	C	C	C	C	D	F	F
13	E	E	D	D	C	C	C	C	D	D	D	D
14	D	E	E	D	D	C	C	C	D	D	F	F
15	F	E	E	E	D	C	D	C	C	D	F	F
16	F	F	F	D	D	C	C	C	C	F	E	E
17	F	F	F	D	C	C	C	C	D	D	E	E
18	E	E	E	D	C	C	C	C	C	E	E	D
19	D	E	D	D	D	C	C	C	C	D	E	E
20	E	F	F	D	C	C	C	C	D	D	E	D
21	E	E	E	D	D	C	C	C	C	E	D	D
22	M	M	M	M	M	M	M	M	M	M	M	M
23	F	F	F	D	C	C	C	C	E	E	E	E
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M
29	F	F	F	D	B	B	C	C	C	D	F	F
30	F	E	E	D	C	C	C	C	D	D	E	E
31	E	E	D	D	D	D	D	D	D	E	F	F

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.0 % B= 0.8 % C=19.1 % D=17.5 % E=10.8 % F=13.2 %

U= 0.0 % M=38.7 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF SEPT. 1979

************************ FIRST INVERSION **

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	0	5	4	4	7	4	N	N	N	0	3	4
2	0	5	4	0	5	4	N	N	N	0	2	4
3	0	4	4	N	N	N	2	4	4	0	2	4
4	0	1	4	N	N	N	N	N	N	0	3	4
5	0	6	4	2	6	4	N	N	N	0	3	4
6	0	4	4	3	7	4	N	N	N	0	2	4
7	0	4	4	2	5	4	N	N	N	0	3	4
8	0	4	4	2	4	4	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	0	2	4
10	0	1	4	N	N	N	N	N	N	0	2	4
11	0	3	4	N	N	N	N	N	N	0	2	4
12	1	4	3	N	N	N	N	N	N	0	2	4
13	0	5	4	3	5	4	N	N	N	0	2	4
14	N	N	N	M	M	M	M	M	M	M	M	M
15	M	M	M	M	M	M	M	M	M	M	M	M
16	M	M	M	M	M	M	M	M	M	M	M	M
17	M	M	M	M	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	M	M	M	M	M	M	M	M	M	M

*********************** SECOND INVERSION **************************************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	N	N	N	N	N	N
3	N	N	N	N	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	6	7	4	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	N	N	N	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	M	M	M	M	M	M	M	M	M
15	M	M	M	M	M	M	M	M	M	M	M	M
16	M	M	M	M	M	M	M	M	M	M	M	M
17	M	M	M	M	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	M	M	M	M	M	M	M	M	M	M

NOTE: FOR TYPE 1=FRONTAL.2=SUBSIDENCE.3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                          MONTH OF SEPT.     1979

       ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100     200     300     400     500     600     700     800     900     TOTAL

---TIME     0- 600 MST ------------------------------------------------------------------------

  001-100      2      0       0       0       0       0       0       0       0       0        2
  101-300      1      1       0       0       0       0       0       0       0       0        2
  301-500      7      0       0       0       0       0       0       0       0       0        7
  501-900      1      0       0       0       0       0       0       0       0       0        1
NO INVERSION                                                                                   2

   TOTAL      11      1       0       0       0       0       0       0       0       0       14

---TIME   601-1200 MST ------------------------------------------------------------------------

  001-100      0      0       0       0       0       0       0       0       0       0        0
  101-300      0      0       2       1       1       0       0       0       0       0        4
  301-500      1      0       1       1       0       0       0       0       0       0        3
  501-900      0      0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                   6

   TOTAL       1      0       3       2       1       0       0       0       0       0       13

---TIME  1201-1800 MST ------------------------------------------------------------------------

  001-100      0      0       0       0       0       0       0       0       0       0        0
  101-300      0      0       1       0       0       0       0       0       0       0        1
  301-500      0      0       0       0       0       0       0       0       0       0        0
  501-900      0      0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                  12

   TOTAL       0      0       1       0       0       0       0       0       0       0       13

---TIME  1301-2400 MST ------------------------------------------------------------------------

  001-100      0      0       0       0       0       0       0       0       0       0        0
  101-300     12      0       0       0       0       0       0       0       0       0       12
  301-500      0      0       0       0       0       0       0       0       0       0        0
  501-900      0      0       0       0       0       0       0       0       0       0        0
NO INVERSION                                                                                   1

   TOTAL      12      0       0       0       0       0       0       0       0       0       13


------------------ FREQUENCY SUMMARY FOR FIRST INVERSION ---------------------------------------

  001-100      2      0       0       0       0       0       0       0       0       0        2
  101-300     13      1       3       1       1       0       0       0       0       0       19
  301-500      8      0       1       1       0       0       0       0       0       0       10
  501-900      1      0       0       0       0       0       0       0       0       0        1
NO INVERSION                                                                                  21

   TOTAL      24      1       4       2       1       0       0       0       0       0       53
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                          ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                     MONTH OF SEPT.     1979

       ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST -----------------------------------------------------------------

 001-100     0      0      0      0      0      0      1      0      0      0        1
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                       13

  TOTAL      0      0      0      0      0      0      1      0      0      0       14

---TIME  601-1200 MST -----------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                       13

  TOTAL      0      0      0      0      0      0      0      0      0      0       13

---TIME 1201-1800 MST -----------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                       13

  TOTAL      0      0      0      0      0      0      0      0      0      0       13

---TIME 1801-2400 MST -----------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                       13

  TOTAL      0      0      0      0      0      0      0      0      0      0       13


----------------- FREQUENCY SUMMARY FOR SECOND INVERSION ----------------------

 001-100     0      0      0      0      0      0      1      0      0      0        1
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                       52

  TOTAL      0      0      0      0      0      0      1      0      0      0       53
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ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF SEPT. 1979

********* TWO HOUR STABILITY ANALYSIS **************************

	HOUR											
DAY	02	04	06	08	10	12	14	16	18	20	22	24
1	F	E	E	D	C	C	C	C	C	D	E	E
2	E	E	E	D	D	D	D	D	D	D	E	E
3	E	F	F	D	C	D	D	D	D	D	F	F
4	E	E	D	D	D	C	D	C	D	E	D	D
5	F	F	F	D	C	C	C	C	C	D	F	F
6	E	F	F	D	C	C	C	C	D	D	E	E
7	F	F	F	D	C	C	C	C	D	D	F	F
8	F	F	F	D	D	C	C	C	D	D	D	D
9	D	D	D	D	D	C	C	C	D	D	F	F
10	E	E	E	D	C	C	C	D	D	D	F	F
11	F	F	F	D	B	D	D	C	D	D	F	D
12	D	D	D	D	B	B	C	C	C	D	E	E
13	F	E	E	D	C	C	C	C	D	D	F	F
14	F	F	F	M	M	M	M	M	M	M	M	M
15	M	M	M	M	M	M	M	M	M	M	M	M
16	M	M	M	M	M	M	M	M	M	M	M	M
17	M	M	M	M	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	M	M	M	M	M	M	M	M	M	M

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.0 % B= 0.8 % C=10.6 % D=16.9 % E= 6.4 % F= 9.4 %

U= 0.0 % M=55.8 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF NOVEMBER 1979

********************** FIRST INVERSION **********************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	0	3	4	N	N	N	N	N	N	0	3	4
2	0	4	4	0	4	4	N	N	N	0	3	4
3	0	3	4	2	4	4	2	4	4	0	2	4
4	0	3	3	0	3	3	N	N	N	0	2	3
5	N	N	N	1	2	4	1	3	4	6	7	4
6	0	1	4	2	3	4	N	N	N	2	3	4
7	2	3	4	2	3	4	N	N	N	1	2	4
8	1	2	4	1	2	4	N	N	N	0	3	4
9	0	3	4	0	2	4	N	N	N	0	3	4
10	0	3	4	0	2	4	0	2	4	0	4	4
11	0	4	4	0	4	4	N	N	N	0	1	4
12	0	3	4	0	2	4	5	6	4	0	3	4
13	0	6	4	0	5	4	3	4	4	0	2	4
14	M	M	M	M	M	M	M	M	M	M	M	M
15	6	7	4	2	4	4	6	7	4	0	1	4
16	0	2	4	3	6	4	3	6	4	2	6	4
17	0	1	4	M	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	N	N	N	0	1	3
27	0	2	4	0	2	4	N	N	N	0	3	4
28	0	3	4	0	3	4	N	N	N	0	3	4
29	0	4	4	2	4	4	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N

********************** SECOND INVERSION **********************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	N	N	N	4	5	4
3	N	N	N	N	N	N	N	N	N	3	5	4
4	N	N	N	N	N	N	N	N	N	N	N	N
5	5	7	4	6	8	4	7	8	4	N	N	N
6	2	3	4	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	3	5	4
12	4	5	4	6	7	4	N	N	N	5	6	4
13	N	N	N	N	N	N	N	N	N	4	6	4
14	M	M	M	M	M	M	M	M	M	M	M	M
15	N	N	N	6	7	4	N	N	N	5	6	4
16	5	6	4	N	N	N	N	N	N	N	N	N
17	3	4	4	M	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL, 2=SUBSIDENCE, 3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                           MONTH OF NOVEMBER 1979

           ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS           INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME     0- 600 MST -------------------------------------------------------------------

 001-100      2      1      1      0      0      0      1      0      0      0        5
 101-300      9      0      0      0      0      0      0      0      0      0        9
 301-500      3      0      0      0      0      0      0      0      0      0        3
 501-900      1      0      0      0      0      0      0      0      0      0        1
NO INVERSION                                                                          2

  TOTAL      15      1      1      0      0      0      1      0      0      0       20

---TIME  601-1200 MST -------------------------------------------------------------------

 001-100      0      2      2      0      0      0      0      0      0      0        4
 101-300      6      0      3      1      0      0      0      0      0      0       10
 301-500      3      0      0      0      0      0      0      0      0      0        3
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                          2

  TOTAL       9      2      5      1      0      0      0      0      0      0       19

---TIME 1201-1800 MST -------------------------------------------------------------------

 001-100      0      0      0      1      0      1      1      0      0      0        3
 101-300      1      1      1      1      0      0      0      0      0      0        4
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                         13

  TOTAL       1      1      1      2      0      1      1      0      0      0       20

---TIME 1801-2400 MST -------------------------------------------------------------------

 001-100      3      1      1      0      0      0      1      0      0      0        6
 101-300     10      0      0      0      0      0      0      0      0      0       10
 301-500      1      0      1      0      0      0      0      0      0      0        2
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                          2

  TOTAL      14      1      2      0      0      0      1      0      0      0       20

----------------- FREQUENCY SUMMARY FOR FIRST INVERSION ---------------------------------

 001-100      5      4      4      1      0      1      3      0      0      0       18
 101-300     26      1      4      2      0      0      0      0      0      0       33
 301-500      7      0      1      0      0      0      0      0      0      0        8
 501-900      1      0      0      0      0      0      0      0      0      0        1
NO INVERSION                                                                         19

  TOTAL      39      5      9      3      0      1      3      0      0      0       79
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                          ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                    MONTH OF NOVEMBER 1979

       ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL
---TIME     0- 600 MST -----------------------------------------------------------------

 001-100     0      0      1      1      1      1      0      0      0      0        4
 101-300     0      0      0      0      0      1      0      0      0      0        1
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        15

  TOTAL      0      0      1      1      1      2      0      0      0      0       20
---TIME   601-1200 MST -----------------------------------------------------------------

 001-100     0      0      0      0      0      0      2      0      0      0        2
 101-300     0      0      0      0      0      0      1      0      0      0        1
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        16

  TOTAL      0      0      0      0      0      0      3      0      0      0       19
---TIME 1201-1800 MST ------------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      1      0      0        1
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        19

  TOTAL      0      0      0      0      0      0      0      1      0      0       20
---TIME 1801-2400 MST ------------------------------------------------------------------

 001-100     0      0      0      0      1      2      0      0      0      0        3
 101-300     0      0      0      2      1      0      0      0      0      0        3
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        14

  TOTAL      0      0      0      2      2      2      0      0      0      0       20


---------------- FREQUENCY SUMMARY FOR SECOND INVERSION ---------------------

 001-100     0      0      1      1      2      3      2      1      0      0       10
 101-300     0      0      0      2      1      1      1      0      0      0        5
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        64

  TOTAL      0      0      1      3      3      4      3      1      0      0       79
```

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF NOVEMBER 1979

********* TWO HOUR STABILITY ANALYSIS *************************

	HOUR											
DAY	02	04	06	08	10	12	14	16	18	20	22	24
1	E	E	E	D	D	C	C	C	F	F	E	E
2	F	E	E	E	D	D	C	D	D	D	E	D
3	D	D	D	D	D	D	D	D	D	D	E	E
4	E	E	E	E	D	C	C	C	E	E	E	E
5	D	D	D	D	D	C	C	B	D	D	D	D
6	E	D	D	D	D	C	C	C	D	D	D	D
7	D	D	D	D	D	C	B	B	D	D	D	D
8	D	D	D	D	D	C	C	C	D	E	F	F
9	E	E	E	E	D	D	B	B	D	E	E	E
10	E	E	E	E	E	E	E	D	D	E	F	F
11	E	E	E	E	E	D	B	B	D	D	E	E
12	F	E	E	E	E	D	B	B	D	F	F	F
13	F	F	F	F	D	D	C	C	D	F	E	E
14	M	M	M	M	M	M	M	M	M	M	M	M
15	D	D	D	D	D	B	B	B	D	E	E	E
16	E	E	D	D	D	B	B	B	D	D	D	D
17	E	E	E	M	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	D	D	E	D	E	D
27	D	E	E	E	D	C	C	C	D	F	F	F
28	F	F	F	F	D	D	B	C	F	F	F	F
29	F	F	F	D	D	D	D	D	D	D	D	D
30	D	D	D	D	D	C	B	D	D	D	D	D

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.0 % B= 4.7 % C= 6.4 % D=29.2 % E=17.2 % F= 8.3 %

U= 0.0 % M=34.2 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF DECEMBER 1979

********************** FIRST INVERSION *************************************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	3	4	4	3	5	4	2	6	4	2	4	4
2	1	4	4	0	2	3	N	N	N	N	N	N
3	0	2	4	N	N	N	0	3	4	0	1	4
4	0	3	4	N	N	N	N	N	N	N	N	N
5	0	1	3	N	N	N	N	N	N	0	1	3
6	0	2	3	0	1	3	0	1	3	0	1	3
7	0	1	3	0	1	4	0	1	4	0	2	4
8	0	2	3	0	1	3	0	1	3	0	2	4
9	0	3	4	0	3	4	N	N	N	0	1	3
10	0	2	3	N	N	N	N	N	N	0	1	4
11	0	3	4	0	2	4	N	N	N	N	N	N
12	N	N	N	0	1	3	N	N	N	0	2	4
13	0	2	4	0	2	4	N	N	N	0	2	3
14	0	2	3	0	1	3	0	1	3	0	2	3
15	N	N	N	N	N	N	N	N	N	0	2	3
16	0	2	3	0	2	3	N	N	N	N	N	N
17	0	2	4	0	2	4	0	5	4	0	5	4
18	0	4	4	0	2	4	0	2	4	0	4	4
19	0	6	4	3	4	4	2	4	4	0	3	4
20	0	3	4	0	3	4	0	1	4	0	3	4
21	0	3	4	0	3	4	0	2	4	0	3	4
22	0	4	4	0	3	4	N	N	N	0	2	4
23	0	2	4	0	2	4	0	3	4	0	3	4
24	0	4	4	0	3	4	2	3	4	0	4	4
25	0	5	4	0	3	4	0	3	4	0	3	4
26	0	1	3	0	1	3	N	N	N	0	2	4
27	0	2	4	0	3	4	N	N	N	0	2	4
28	0	1	4	0	1	4	N	N	N	0	1	4
29	0	1	4	0	2	4	N	N	N	0	2	4
30	0	2	4	0	1	4	N	N	N	0	1	4
31	0	1	4	0	1	4	0	4	4	0	7	4

********************** SECOND INVERSION *************************************

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	N	N	N	N	N	N	N	N	N	N	N	N
2	0	3	4	N	N	N	N	N	N	N	N	N
3	N	N	N	N	N	N	N	N	N	2	4	4
4	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	3	5	4	2	4	4	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	N	N	N	N	N	N	N	N	N	N	N	N
13	3	4	4	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	N	N	N
15	N	N	N	N	N	N	N	N	N	N	N	N
16	N	N	N	N	N	N	N	N	N	N	N	N
17	5	6	4	3	5	4	N	N	N	N	N	N
18	N	N	N	N	N	N	N	N	N	N	N	N
19	N	N	N	N	N	N	N	N	N	N	N	N
20	N	N	N	N	N	N	N	N	N	N	N	N
21	N	N	N	N	N	N	N	N	N	N	N	N
22	N	N	N	N	N	N	N	N	N	N	N	N
23	N	N	N	N	N	N	N	N	N	N	N	N
24	N	N	N	N	N	N	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	3	6	4
31	5	6	4	4	6	4	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF DECEMBER 1979

******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS (METERS)	INVERSION BASE HEIGHT (IN METERS) SFC	100	200	300	400	500	600	700	800	900	TOTAL
---TIME 0- 600 MST											
001-100	6	0	0	1	0	0	0	0	0	0	7
101-300	16	1	0	0	0	0	0	0	0	0	17
301-500	4	0	0	0	0	0	0	0	0	0	4
501-900	1	0	0	0	0	0	0	0	0	0	1
NO INVERSION											2
TOTAL	27	1	0	1	0	0	0	0	0	0	31
---TIME 601-1200 MST											
001-100	9	0	0	1	0	0	0	0	0	0	10
101-300	15	0	0	1	0	0	0	0	0	0	16
301-500	0	0	0	0	0	0	0	0	0	0	0
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											5
TOTAL	24	0	0	2	0	0	0	0	0	0	31
---TIME 1201-1800 MST											
001-100	5	0	1	0	0	0	0	0	0	0	6
101-300	5	0	1	0	0	0	0	0	0	0	6
301-500	2	0	1	0	0	0	0	0	0	0	3
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											16
TOTAL	12	0	3	0	0	0	0	0	0	0	31
---TIME 1801-2400 MST											
001-100	7	0	0	0	0	0	0	0	0	0	7
101-300	15	0	1	0	0	0	0	0	0	0	16
301-500	3	0	0	0	0	0	0	0	0	0	3
501-900	1	0	0	0	0	0	0	0	0	0	1
NO INVERSION											4
TOTAL	26	0	1	0	0	0	0	0	0	0	31
FREQUENCY SUMMARY FOR FIRST INVERSION											
001-100	27	0	1	2	0	0	0	0	0	0	30
101-300	51	1	2	1	0	0	0	0	0	0	55
301-500	9	0	1	0	0	0	0	0	0	0	10
501-900	2	0	0	0	0	0	0	0	0	0	2
NO INVERSION											27
TOTAL	89	1	4	3	0	0	0	0	0	0	124

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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                          MONTH OF DECEMBER 1979

         ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS           INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME     0- 600 MST ------------------------------------------------------------------

 001-100      0      0      0      1      0      2      0      0      0      0        3
 101-300      1      0      0      1      0      0      0      0      0      0        2
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        26

  TOTAL       1      0      0      2      0      2      0      0      0      0       31

---TIME   601-1200 MST ------------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0        0
 101-300      0      0      1      1      1      0      0      0      0      0        3
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        28

  TOTAL       0      0      1      1      1      0      0      0      0      0       31

---TIME  1201-1800 MST ------------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0        0
 101-300      0      0      0      0      0      0      0      0      0      0        0
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        31

  TOTAL       0      0      0      0      0      0      0      0      0      0       31

---TIME  1801-2400 MST ------------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0        0
 101-300      0      0      1      1      0      0      0      0      0      0        2
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        29

  TOTAL       0      0      1      1      0      0      0      0      0      0       31


------------------ FREQUENCY SUMMARY FOR SECOND INVERSION -----------------------

 001-100      0      0      0      1      0      2      0      0      0      0        3
 101-300      1      0      2      3      1      0      0      0      0      0        7
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                       114

  TOTAL       1      0      2      4      1      2      0      0      0      0      124
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ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF DECEMBER 1979

********* TWO HOUR STABILITY ANALYSIS ***************************

	HOUR											
DAY	02	04	06	08	10	12	14	16	18	20	22	24
1	D	D	D	D	D	D	B	D	D	D	D	D
2	D	D	E	D	D	D	D	D	E	E	E	E
3	E	E	E	D	D	D	E	D	E	E	E	E
4	D	D	D	D	D	D	D	D	D	D	D	D
5	E	E	D	D	D	D	D	D	D	E	E	E
6	E	E	E	E	E	D	D	E	E	E	E	E
7	E	E	E	E	E	D	D	E	E	F	D	D
8	D	E	E	D	D	E	E	E	E	E	E	E
9	D	E	E	D	D	D	D	D	D	D	E	D
10	D	D	D	D	D	D	D	D	E	E	F	F
11	E	E	E	E	E	E	D	D	D	D	D	D
12	D	D	E	D	D	D	D	D	F	F	E	E
13	D	E	E	D	D	D	D	E	D	D	D	E
14	E	E	E	E	E	E	E	E	E	E	E	D
15	D	D	D	D	D	D	D	D	E	E	E	E
16	E	E	E	E	E	E	D	D	D	D	D	E
17	E	E	D	D	D	D	D	D	D	D	D	D
18	E	E	D	D	D	D	D	D	E	E	E	E
19	E	E	E	D	D	D	D	D	D	D	E	D
20	D	D	F	E	E	E	E	E	E	E	E	E
21	E	E	E	D	E	E	E	E	E	E	E	E
22	E	E	E	E	E	D	D	D	E	D	E	E
23	E	E	E	F	F	F	E	E	E	E	E	E
24	E	E	E	E	E	D	D	D	D	E	E	E
25	E	E	D	D	D	D	D	D	D	E	D	E
26	E	E	E	E	E	D	D	D	E	E	E	E
27	E	E	E	E	E	D	D	D	D	E	E	E
28	E	E	E	E	D	D	D	D	D	E	E	E
29	E	E	E	E	D	D	B	D	D	D	E	E
30	E	E	E	E	E	D	D	B	E	E	D	D
31	E	E	E	E	E	D	D	E	E	E	E	D

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.0 % B= 0.8 % C= 0.0 % D=45.4 % E=51.3 % F= 2.4 %

U= 0.0 % M= 0.0 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF FEBRUARY 1980

FIRST INVERSION

	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
DAY	BASE	TOP	TYPE	BASE	TOP	TYPE	BASE	TOP	TYPE	BASE	TOP	TYPE
	(100M)	(100M)	*	(100M)	(100M)	*	(100M)	(100M)	*	(100M)	(100M)	*
1	0	5	3	0	7	3	0	6	3	0	6	3
2	0	5	3	0	5	3	0	4	3	0	5	3
3	0	4	3	0	4	3	N	N	N	0	3	4
4	0	4	4	0	3	4	N	N	N	0	2	3
5	0	2	3	0	4	3	1	4	3	0	6	3
6	N	N	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	0	4	3	0	4	3
8	0	4	3	0	3	3	0	3	3	0	3	3
9	0	3	3	0	2	2	0	2	2	0	3	4
10	0	3	4	0	5	4	0	2	3	0	3	3
11	0	2	3	0	2	3	N	N	N	0	3	3
12	0	2	3	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	0	2	4	0	2	4	0	2	4	0	3	4
15	N	N	N	0	3	4	1	3	4	0	2	3
16	0	3	3	1	3	4	0	4	3	0	4	3
17	0	2	3	0	7	3	0	6	3	0	2	3
18	0	6	3	2	4	4	0	4	3	0	6	3
19	0	3	3	0	3	3	0	2	3	0	3	3
20	0	4	3	N	N	N	2	3	9	0	3	3
21	0	3	3	0	3	3	N	N	N	0	2	3
22	0	4	3	0	5	3	N	N	N	0	3	3
23	0	2	3	0	5	3	N	N	N	0	3	3
24	0	3	3	0	6	3	0	4	3	0	5	3
25	0	5	3	0	6	3	0	4	3	0	4	3
26	0	5	3	0	6	3	0	6	3	0	5	3
27	0	4	3	0	4	3	0	3	3	0	4	3
28	0	5	3	0	5	3	0	2	3	N	N	N

SECOND INVERSION

	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
DAY	BASE	TOP	TYPE	BASE	TOP	TYPE	BASE	TOP	TYPE	BASE	TOP	TYPE
	(100M)	(100M)	*	(100M)	(100M)	*	(100M)	(100M)	*	(100M)	(100M)	*
1	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	6	7	2	N	N	N
3	N	N	N	N	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	N	N	N	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	N	N	N
15	N	N	N	N	N	N	N	N	N	N	N	N
16	N	N	N	N	N	N	N	N	N	N	N	N
17	4	5	9	N	N	N	N	N	N	3	6	3
18	N	N	N	N	N	N	N	N	N	N	N	N
19	N	N	N	N	N	N	N	N	N	N	N	N
20	N	N	N	N	N	N	N	N	N	N	N	N
21	N	N	N	N	N	N	N	N	N	N	N	N
22	N	N	N	N	N	N	N	N	N	N	N	N
23	N	N	N	N	N	N	N	N	N	N	N	N
24	N	N	N	N	N	N	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL, 2=SUBSIDENCE, 3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                      MONTH OF FEBRUARY 1980

      ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC   100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST -------------------------------------------------------------------

 001-100     0     0      0      0      0      0      0      0      0      0       0
 101-300    12     0      0      0      0      0      0      0      0      0      12
 301-500    11     0      0      0      0      0      0      0      0      0      11
 501-900     1     0      0      0      0      0      0      0      0      0       1
NO INVERSION                                                                       4

  TOTAL     24     0      0      0      0      0      0      0      0      0      28

---TIME  501-1200 MST -------------------------------------------------------------------

 001-100     0     0      0      0      0      0      0      0      0      0       0
 101-300     8     1      1      0      0      0      0      0      0      0      10
 301-500     8     0      0      0      0      0      0      0      0      0       8
 501-900     5     0      0      0      0      0      0      0      0      0       5
NO INVERSION                                                                       5

  TOTAL     21     1      1      0      0      0      0      0      0      0      28

---TIME 1201-1800 MST -------------------------------------------------------------------

 001-100     0     0      1      0      0      0      0      0      0      0       1
 101-300     7     2      0      0      0      0      0      0      0      0       9
 301-500     6     0      0      0      0      0      0      0      0      0       6
 501-900     3     0      0      0      0      0      0      0      0      0       3
NO INVERSION                                                                       9

  TOTAL     16     2      1      0      0      0      0      0      0      0      28

---TIME 1801-2400 MST -------------------------------------------------------------------

 001-100     0     0      0      0      0      0      0      0      0      0       0
 101-300    14     0      0      0      0      0      0      0      0      0      14
 301-500     6     0      0      0      0      0      0      0      0      0       6
 501-900     4     0      0      0      0      0      0      0      0      0       4
NO INVERSION                                                                       4

  TOTAL     24     0      0      0      0      0      0      0      0      0      28


------------------ FREQUENCY SUMMARY FOR FIRST INVERSION --------------------------

 001-100     0     0      1      0      0      0      0      0      0      0       1
 101-300    41     3      1      0      0      0      0      0      0      0      45
 301-500    31     0      0      0      0      0      0      0      0      0      31
 501-900    13     0      0      0      0      0      0      0      0      0      13
NO INVERSION                                                                      22

  TOTAL     85     3      2      0      0      0      0      0      0      0     112
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                          ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                      MONTH OF FEBRUARY 1980

      ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS           INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST -----------------------------------------------------------------

 001-100     0      0      0      0      1      0      0      0      0      0        1
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        27

  TOTAL      0      0      0      0      1      0      0      0      0      0       28

---TIME  601-1200 MST -----------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        28

  TOTAL      0      0      0      0      0      0      0      0      0      0       28

---TIME 1201-1800 MST -----------------------------------------------------------------

 001-100     0      0      0      0      0      0      1      0      0      0        1
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        27

  TOTAL      0      0      0      0      0      0      1      0      0      0       28

---TIME 1801-2400 MST -----------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      1      0      0      0      0      0      0        1
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        27

  TOTAL      0      0      0      1      0      0      0      0      0      0       28


---------------- FREQUENCY SUMMARY FOR SECOND INVERSION ---------------------

 001-100     0      0      0      0      1      0      1      0      0      0        2
 101-300     0      0      0      1      0      0      0      0      0      0        1
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                       109

  TOTAL      0      0      0      1      1      0      1      0      0      0      112
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ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF FEBRUARY 1980

********* TWO HOUR STABILITY ANALYSIS **************************

DAY	02	04	06	08	10	12	14	16	18	20	22	24
1	E	E	E	E	E	E	E	E	F	F	F	[illegible]
2	F	D	D	F	E	F	D	F	E	E	D	D
3	E	E	E	E	F	D	C	C	C	F	F	[illegible]
4	E	E	E	E	E	E	D	C	C	F	F	F
5	F	F	F	E	E	D	C	C	E	E	F	E
6	M	M	M	M	M	M	M	M	M	M	M	M
7	M	M	M	M	M	E	E	E	E	E	E	F
8	E	E	E	E	E	E	E	E	E	E	F	E
9	E	E	E	E	D	D	D	E	F	E	F	[illegible]
10	E	E	E	E	E	D	E	E	E	E	E	E
11	E	E	E	E	E	D	D	D	F	E	E	F
12	E	E	E	M	M	M	M	M	M	M	M	M
13	M	M	M	M	M	D	D	D	D	D	D	D
14	E	E	E	E	E	D	C	E	F	E	E	[illegible]
15	D	D	E	E	E	E	E	D	D	D	E	E
16	E	E	E	E	D	C	B	E	E	E	E	E
17	E	E	E	E	E	E	E	E	E	E	E	E
18	E	E	D	D	D	D	E	E	D	E	D	E
19	E	E	E	E	E	E	E	E	E	E	F	F
20	E	E	E	D	D	C	C	C	E	F	E	E
21	E	E	E	E	F	D	B	B	B	F	E	[illegible]
22	E	E	E	E	E	E	D	B	B	F	F	F
23	F	F	F	F	F	F	D	C	F	F	F	F
24	F	F	F	F	F	F	E	E	E	E	F	E
25	E	E	E	E	E	E	E	E	E	E	E	E
26	E	E	E	E	E	E	E	E	E	E	E	E
27	E	E	E	E	E	E	E	E	F	E	E	F
28	E	E	E	E	E	E	E	D	D	D	D	D

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.0 % B= 1.8 % C= 3.9 % D=13.4 % E=63.4 % F= 8.3 %

U= 0.0 % M= 9.2 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

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                                   ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                              MONTH OF MARCH     1980

********************** FIRST INVERSION **************************************
       0000-0600 MST          0601-1200 MST          1201-1800 MST          1801-2400 MST
DAY     BASE TOP  TYPE        BASE  TOP  TYPE        BASE  TOP  TYPE        BASE  TOP  TYPE
       (100M)(100M)  *        (100M)(100M)  *        (100M)(100M)  *        (100M)(100M)  *

 1        0      1      4       0      1      4       0      1      4       0      3      4
 2        0      4      4       0      5      4       0      4      4       0      3      4
 3        0      3      3       0      2      3       N      N      N       0      2      4
 4        0      3      4       0      3      4       0      3      4       0      3      4
 5        0      3      4       0      1      4       N      N      N       N      N      N
 6        N      N      N       N      N      N       N      N      N       N      N      N
 7        N      N      N       0      4      1       0      4      1       0      3      3
 8        0      3      3       0      3      3       1      3      3       2      3      3
 9        2      3      3       2      3      3       2      4      4       0      3      4
10        0      3      4       0      3      4       0      3      4       0      2      4
11        0      3      4       0      3      4       0      3      4       0      4      4
12        0      3      4       0      2      4       0      2      3       0      1      3
13        0      2      4       0      3      4       N      N      N       0      5      4
14        0      2      4       0      2      4       0      2      4       0      2      3
15        0      2      3       0      2      4       0      1      4       0      3      4
16        0      4      4       0      5      4       0      5      4       0      5      4
17        0      4      4       0      2      4       0      1      4       0      2      3
18        N      N      N       0      1      3       0      1      4       0      2      4
19        0      3      4       0      3      4       0      1      4       0      2      4
20        0      3      4       0      6      4       0      3      4       0      3      4
21        0      2      4       0      4      4       0      4      4       0      2      4
22        0      3      4       0      3      4       0      2      4       0      2      4
23        0      2      4       0      2      4       0      4      4       0      1      4
24        0      5      4       0      5      4       N      N      N       N      N      N
25        N      N      N       N      N      N       N      N      N       N      N      N
26        0      1      3       0      1      3       N      N      N       0      2      3
27        0      2      4       0      4      4       0      3      4       0      3      4
28        0      3      4       0      3      4       3      4      4       0      2      4
29        0      3      4       0      3      4       1      2      4       0      3      4
30        0      3      4       0      4      4       1      3      4       0      1      4
31        0      3      4       0      4      4       0      3      4       0      2      4

********************** SECOND INVERSION *************************************
       0000-0600 MST          0601-1200 MST          1201-1800 MST          1801-2400 MST
DAY     BASE TOP  TYPE        BASE  TOP  TYPE        BASE  TOP  TYPE        BASE  TOP  TYPE
       (100M)(100M)  *        (100M)(100M)  *        (100M)(100M)  *        (100M)(100M)  *

 1        3      5      4       3      5      4       3      5      4       N      N      N
 2        N      N      N       N      N      N       N      N      N       N      N      N
 3        N      N      N       N      N      N       N      N      N       N      N      N
 4        N      N      N       N      N      N       N      N      N       N      N      N
 5        N      N      N       N      N      N       N      N      N       N      N      N
 6        N      N      N       N      N      N       N      N      N       N      N      N
 7        N      N      N       N      N      N       N      N      N       N      N      N
 8        N      N      N       N      N      N       N      N      N       N      N      N
 9        N      N      N       N      N      N       N      N      N       N      N      N
10        N      N      N       N      N      N       N      N      N       N      N      N
11        N      N      N       N      N      N       N      N      N       N      N      N
12        N      N      N       N      N      N       N      N      N       N      N      N
13        N      N      N       N      N      N       N      N      N       N      N      N
14        3      5      4       3      4      4       4      5      4       N      N      N
15        N      N      N       N      N      N       N      N      N       N      N      N
16        N      N      N       N      N      N       N      N      N       N      N      N
17        5      7      4       4      5      4       N      N      N       N      N      N
18        N      N      N       N      N      N       N      N      N       N      N      N
19        N      N      N       N      N      N       N      N      N       N      N      N
20        N      N      N       N      N      N       5      6      4       5      6      4
21        3      4      4       N      N      N       N      N      N       5      6      4
22        N      N      N       N      N      N       5      6      4       5      6      4
23        N      N      N       3      5      4       5      6      4       2      6      4
24        N      N      N       N      N      N       N      N      N       N      N      N
25        N      N      N       N      N      N       N      N      N       N      N      N
26        N      N      N       N      N      N       N      N      N       N      N      N
27        N      N      N       N      N      N       N      N      N       N      N      N
28        N      N      N       N      N      N       N      N      N       N      N      N
29        N      N      N       N      N      N       N      N      N       N      N      N
30        N      N      N       N      N      N       N      N      N       N      N      N
31        N      N      N       N      N      N       N      N      N       4      6      4

     NOTE:   FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
                      4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
             N=NO INVERSION M=MISSING DATA OR UNKNOWN
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ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF MARCH 1980

******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS (METERS)	SFC	100	200	300	400	500	600	700	800	900	TOTAL
	INVERSION BASE HEIGHT (IN METERS)										
---TIME 0- 600 MST											
001-100	2	0	1	0	0	0	0	0	0	0	3
101-300	20	0	0	0	0	0	0	0	0	0	20
301-500	4	0	0	0	0	0	0	0	0	0	4
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											4
TOTAL	26	0	1	0	0	0	0	0	0	0	31
---TIME 601-1200 MST											
001-100	4	0	1	0	0	0	0	0	0	0	5
101-300	15	0	0	0	0	0	0	0	0	0	15
301-500	8	0	0	0	0	0	0	0	0	0	8
501-900	1	0	0	0	0	0	0	0	0	0	1
NO INVERSION											2
TOTAL	28	0	1	0	0	0	0	0	0	0	31
---TIME 1201-1800 MST											
001-100	5	1	0	1	0	0	0	0	0	0	7
101-300	9	2	1	0	0	0	0	0	0	0	12
301-500	5	0	0	0	0	0	0	0	0	0	5
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											7
TOTAL	19	3	1	1	0	0	0	0	0	0	31
---TIME 1801-2400 MST											
001-100	3	0	1	0	0	0	0	0	0	0	4
101-300	20	0	0	0	0	0	0	0	0	0	20
301-500	3	0	0	0	0	0	0	0	0	0	3
501-900	0	0	0	0	0	0	0	0	0	0	0
NO INVERSION											4
TOTAL	26	0	1	0	0	0	0	0	0	0	31
FREQUENCY SUMMARY FOR FIRST INVERSION											
001-100	14	1	3	1	0	0	0	0	0	0	19
101-300	64	2	1	0	0	0	0	0	0	0	67
301-500	20	0	0	0	0	0	0	0	0	0	20
501-900	1	0	0	0	0	0	0	0	0	0	1
NO INVERSION											17
TOTAL	99	3	4	1	0	0	0	0	0	0	124

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                                  ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                           MONTH OF MARCH     1980

         ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS            INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100     200     300     400     500     600     700     800     900     TOTAL

---TIME    0- 600 MST ------------------------------------------------------------------------

 001-100      0      0       0       1       0       0       0       0       0       0       1
 101-300      0      0       0       2       0       1       0       0       0       0       3
 301-500      0      0       0       0       0       0       0       0       0       0       0
 501-900      0      0       0       0       0       0       0       0       0       0       0
NO INVERSION                                                                                27

  TOTAL       0      0       0       3       0       1       0       0       0       0      31

---TIME  601-1200 MST ------------------------------------------------------------------------

 001-100      0      0       0       1       1       0       0       0       0       0       2
 101-300      0      0       0       2       0       0       0       0       0       0       2
 301-500      0      0       0       0       0       0       0       0       0       0       0
 501-900      0      0       0       0       0       0       0       0       0       0       0
NO INVERSION                                                                                27

  TOTAL       0      0       0       3       1       0       0       0       0       0      31

---TIME 1201-1800 MST ------------------------------------------------------------------------

 001-100      0      0       0       0       1       3       0       0       0       0       4
 101-300      0      0       0       1       0       0       0       0       0       0       1
 301-500      0      0       0       0       0       0       0       0       0       0       0
 501-900      0      0       0       0       0       0       0       0       0       0       0
NO INVERSION                                                                                26

  TOTAL       0      0       0       1       1       3       0       0       0       0      31

---TIME 1801-2400 MST ------------------------------------------------------------------------

 001-100      0      0       0       0       0       3       0       0       0       0       3
 101-300      0      0       0       0       1       0       0       0       0       0       1
 301-500      0      0       1       0       0       0       0       0       0       0       1
 501-900      0      0       0       0       0       0       0       0       0       0       0
NO INVERSION                                                                                26

  TOTAL       0      0       1       0       1       3       0       0       0       0      31


------------------- FREQUENCY SUMMARY FOR SECOND INVERSION ----------------------

 001-100      0      0       0       2       2       6       0       0       0       0      10
 101-300      0      0       0       5       1       1       0       0       0       0       7
 301-500      0      0       1       0       0       0       0       0       0       0       1
 501-900      0      0       0       0       0       0       0       0       0       0       0
NO INVERSION                                                                               106

  TOTAL       0      0       1       7       3       7       0       0       0       0     124
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ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF MARCH 1980

********* TWO HOUR STABILITY ANALYSIS ***************************

	HOUR											
DAY	02	04	06	08	10	12	14	16	18	20	22	24
1	E	F	F	D	D	D	D	D	D	D	D	E
2	E	E	E	E	E	D	E	E	E	E	D	E
3	D	E	E	E	E	D	D	D	D	E	E	E
4	E	E	E	E	E	E	E	E	E	D	D	D
5	D	D	D	D	D	D	D	D	D	D	D	D
6	M	M	M	M	M	M	M	D	D	D	D	D
7	D	D	D	D	D	D	D	D	D	E	D	D
8	D	D	D	D	D	E	D	D	D	D	D	D
9	D	D	D	D	D	D	D	D	E	D	D	D
10	D	D	D	D	D	D	E	D	D	D	D	D
11	E	E	E	E	E	E	E	E	E	E	D	D
12	D	D	D	D	D	E	E	D	D	D	E	E
13	E	E	E	E	D	D	D	D	D	E	D	D
14	D	D	D	D	D	D	D	E	E	D	E	E
15	E	E	E	E	E	E	D	D	E	E	E	E
16	E	F	F	E	E	E	D	E	E	E	E	D
17	D	D	D	D	E	E	D	D	E	E	D	D
18	D	D	D	D	E	D	D	E	D	D	D	D
19	E	E	E	E	E	E	E	E	E	F	F	F
20	F	F	F	E	E	E	E	E	E	E	E	E
21	F	E	E	E	E	E	E	E	E	E	F	F
22	F	F	F	E	E	E	E	E	E	E	D	D
23	E	E	D	D	D	D	D	D	D	E	E	E
24	E	E	E	E	E	E	D	D	D	D	D	D
25	D	D	D	D	D	D	D	D	D	D	D	D
26	F	E	E	E	D	D	D	D	E	E	E	E
27	E	E	E	E	E	E	E	E	E	E	E	E
28	E	E	E	F	E	E	D	D	D	E	E	E
29	E	E	E	E	E	E	D	D	D	E	E	E
30	D	D	E	E	E	D	D	D	D	F	E	E
31	F	E	E	E	E	E	E	E	E	E	E	E

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.0 % B= 0.0 % C= 0.0 % D=45.4 % E=47.3 % F= 5.4 %

U= 0.0 % M= 1.9 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                          MONTH OF APRIL     1980

*********************** FIRST INVERSION ***************************************
      0000-0600 MST       0601-1200 MST       1201-1800 MST       1801-2400 MST
DAY    BASE TOP  TYPE     BASE  TOP  TYPE     BASE  TOP  TYPE     BASE  TOP  TYPE
      (100M)(100M) *      (100M)(100M) *      (100M)(100M) *      (100M)(100M) *

 1       0     5     4      0     3     4      N     N     N      0     2     4
 2       0     3     4      N     N     N      N     N     N      0     2     4
 3       0     2     3      1     4     3      N     N     N      0     2     3
 4       0     5     3      0     4     3      N     N     N      0     3     3
 5       0     5     3      1     5     3      2     5     4      0     4     3
 6       0     4     3      1     5     3      2     5     4      0     4     4
 7       0     5     3      1     4     4      N     N     N      0     2     3
 8       0     5     3      1     5     3      N     N     N      0     4     3
 9       0     5     3      1     4     3      1.    3     4      0     5     3
10       0     4     3      0     4     3      1     4     4      0     5     3
11       2     4     3      5     6     4      7     8     4      0     6     3
12       0     5     3      2     6     3      N     N     N      0     4     3
13       0     5     3      1     5     3      N     N     N      0     3     3
14       0     5     3      1     5     3      N     N     N      0     4     3
15       0     3     4      N     N     N      N     N     N      0     3     3
16       0     4     3      1     4     3      N     N     N      0     3     3
17       0     4     3      1     5     3      N     N     N      0     2     3
18       0     2     3      N     N     N      N     N     N      0     2     3
19       0     7     3      1     6     3      N     N     N      0     3     3
20       0     6     3      1     5     3      N     N     N      0     4     3
21       0     6     4      1     5     4      N     N     N      0     3     4
22       0     4     4      1     4     4      N     N     N      0     4     3
23       0     6     3      2     6     3      N     N     N      0     5     3
24       0     6     3      1     5     3      N     N     N      0     4     3
25       0     5     3      1     4     3      N     N     N      0     4     3
26       0     6     3      2     7     3      N     N     N      0     3     3
27       0     5     3      2     6     3      N     N     N      0     2     3
28       0     6     3      2     6     3      N     N     N      0     3     3
29       0     3     3      N     N     N      N     N     N      0     2     3
30       0     2     3      4     7     4      2     5     4      0     6     3

*********************** SECOND INVERSION **************************************
      0000-0600 MST       0601-1200 MST       1201-1800 MST       1801-2400 MST
DAY    BASE TOP  TYPE     BASE  TOP  TYPE     BASE  TOP  TYPE     BASE  TOP  TYPE
      (100M)(100M) *      (100M)(100M) *      (100M)(100M) *      (100M)(100M) *

 1       N     N     N      N     N     N      N     N     N      N     N     N
 2       N     N     N      N     N     N      N     N     N      N     N     N
 3       N     N     N      N     N     N      N     N     N      N     N     N
 4       N     N     N      N     N     N      N     N     N      N     N     N
 5       N     N     N      N     N     N      N     N     N      N     N     N
 6       N     N     N      N     N     N      N     N     N      N     N     N
 7       N     N     N      N     N     N      N     N     N      N     N     N
 8       N     N     N      N     N     N      N     N     N      N     N     N
 9       N     N     N      N     N     N      N     N     N      N     N     N
10       N     N     N      N     N     N      N     N     N      N     N     N
11       N     N     N      N     N     N      N     N     N      N     N     N
12       N     N     N      N     N     N      N     N     N      N     N     N
13       N     N     N      N     N     N      N     N     N      N     N     N
14       N     N     N      N     N     N      N     N     N      N     N     N
15       N     N     N      N     N     N      N     N     N      N     N     N
16       N     N     N      N     N     N      N     N     N      N     N     N
17       N     N     N      N     N     N      N     N     N      N     N     N
18       N     N     N      N     N     N      N     N     N      N     N     N
19       N     N     N      N     N     N      N     N     N      N     N     N
20       N     N     N      N     N     N      N     N     N      N     N     N
21       N     N     N      N     N     N      N     N     N      N     N     N
22       N     N     N      N     N     N      N     N     N      N     N     N
23       N     N     N      N     N     N      N     N     N      N     N     N
24       N     N     N      N     N     N      N     N     N      N     N     N
25       N     N     N      N     N     N      N     N     N      N     N     N
26       N     N     N      N     N     N      N     N     N      N     N     N
27       N     N     N      N     N     N      N     N     N      N     N     N
28       N     N     N      N     N     N      N     N     N      N     N     N
29       N     N     N      N     N     N      N     N     N      N     N     N
30       N     N     N      N     N     N      N     N     N      N     N     N

    NOTE:   FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
                     4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
            N=NO INVERSION M=MISSING DATA OR UNKNOWN
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                        ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                      MONTH OF APRIL     1980

       ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 500 MST ---------------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0       0
 101-300      6      0      1      0      0      0      0      0      0      0       7
 301-500     15      0      0      0      0      0      0      0      0      0      15
 501-900      8      0      0      0      0      0      0      0      0      0       8
NO INVERSION                                                                         0

  TOTAL      29      0      1      0      0      0      0      0      0      0      30

---TIME  501-1200 MST ---------------------------------------------------------------------

 001-100      0      0      0      0      0      1      0      0      0      0       1
 101-300      1      6      0      0      1      0      0      0      0      0       8
 301-500      2     10      5      0      0      0      0      0      0      0      17
 501-900      0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                         4

  TOTAL       3     16      5      0      1      1      0      0      0      0      30

---TIME 1201-1800 MST ---------------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      1      0      0       1
 101-300      0      2      3      0      0      0      0      0      0      0       5
 301-500      0      0      0      0      0      0      0      0      0      0       0
 501-900      0      0      0      0      0      0      0      0      0      0       0
NO INVERSION                                                                        24

  TOTAL       0      2      3      0      0      0      0      1      0      0      30

---TIME 1801-2400 MST ---------------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0       0
 101-300     16      0      0      0      0      0      0      0      0      0      16
 301-500     12      0      0      0      0      0      0      0      0      0      12
 501-900      2      0      0      0      0      0      0      0      0      0       2
NO INVERSION                                                                         0

  TOTAL      30      0      0      0      0      0      0      0      0      0      30


---------------- FREQUENCY SUMMARY FOR FIRST INVERSION ------------------------------------

 001-100      0      0      0      0      0      1      0      1      0      0       2
 101-300     23      8      4      0      1      0      0      0      0      0      36
 301-500     29     10      5      0      0      0      0      0      0      0      44
 501-900     10      0      0      0      0      0      0      0      0      0      10
NO INVERSION                                                                        28

  TOTAL      62     18      9      0      1      1      0      1      0      0     120
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                        ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                      MONTH OF APRIL     1980

       ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME     0- 600 MST ---------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                        30

  TOTAL       0      0      0      0      0      0      0      0      0      0     30

---TIME   601-1200 MST ---------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                        30

  TOTAL       0      0      0      0      0      0      0      0      0      0     30

---TIME  1201-1800 MST ---------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                        30

  TOTAL       0      0      0      0      0      0      0      0      0      0     30

---TIME  1801-2400 MST ---------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                        30

  TOTAL       0      0      0      0      0      0      0      0      0      0     30


----------------- FREQUENCY SUMMARY FOR SECOND INVERSION ---------------------

 001-100      0      0      0      0      0      0      0      0      0      0      0
 101-300      0      0      0      0      0      0      0      0      0      0      0
 301-500      0      0      0      0      0      0      0      0      0      0      0
 501-900      0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                       120

  TOTAL       0      0      0      0      0      0      0      0      0      0    120
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                         ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                      MONTH OF APRIL     1980


********* TWO HOUR STABILITY ANALYSIS *************************

          ---------------------- HOUR -------------------------------
DAY    02    04    06    08    10    12    14    16    18    20    22    24

 1     E     E     E     E     D     C     C     C     C     E     F     E
 2     F     E     F     D     C     C     C     C     C     E     F     F
 3     E     E     E     D     B     B     C     C     C     F     F     F
 4     F     E     E     F     D     C     C     C     C     E     F     E
 5     F     E     E     E     D     C     B     C     C     F     D     F
 6     E     E     E     E     D     C     C     C     E     E     F     E
 7     E     E     E     E     D     C     C     C     C     F     F     F
 8     F     F     F     D     C     C     C     C     E     E     F     E
 9     F     E     E     E     D     B     B     C     C     E     E     E
10     E     E     E     E     E     D     C     C     C     E     F     F
11     E     D     D     D     B     B     B     C     C     D     F     F
12     F     F     F     E     D     C     C     C     C     E     E     E
13     F     F     F     E     D     C     C     C     C     D     E     E
14     F     F     F     E     D     C     C     C     E     E     D     E
15     E     E     D     D     D     C     C     D     D     F     F     E
16     E     F     F     D     C     C     C     C     C     F     F     F
17     F     F     F     E     D     B     C     C     C     C     E     E
18     E     E     E     D     B     B     C     C     D     E     E     E
19     F     F     F     E     D     C     C     C     C     D     F     F
20     F     E     E     D     C     C     C     C     C     E     E     E
21     E     E     F     D     C     C     C     C     D     F     F     E
22     E     E     E     E     D     C     C     C     C     D     F     F
23     F     F     F     D     C     C     C     C     C     D     F     E
24     E     E     E     E     D     C     C     B     B     E     F     E
25     E     E     E     D     C     C     C     C     C     D     F     F
26     F     E     E     D     C     C     C     C     C     D     F     E
27     F     F     F     E     D     C     B     C     C     F     F     F
28     F     E     E     E     D     C     C     C     D     D     E     F
29     E     E     E     D     D     C     C     C     E     D     D     F
30     E     E     E     D     C     C     C     C     C     D     E     E
            PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

    A= 0.0 %   B= 3.9 %   C=30.3 %   D=14.7 %   E=35.8 %   F=15.3 %

    U= 0.0 %   M= 0.0 %

NOTE: U=UNKNOWN M=MISSING DATA
        CLOUD COVER CONDITIONS USED FROM NWS STATION  AT KALISPELL
        WIND DATA USED FROM NWS STATION AT KALISPELL
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ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF MAY 1980

*********************** FIRST INVERSION **

DAY	0000-0600 MST BASE (100M)	TOP (100M)	TYPE *	0601-1200 MST BASE (100M)	TOP (100M)	TYPE *	1201-1800 MST BASE (100M)	TOP (100M)	TYPE *	1801-2400 MST BASE (100M)	TOP (100M)	TYPE *
1	0	7	3	2	4	3	N	N	N	0	2	3
2	0	5	3	1	3	3	N	N	N	0	4	3
3	0	5	3	2	6	3	N	N	N	0	3	3
4	0	6	3	2	6	3	N	N	N	0	2	3
5	0	6	3	2	5	3	N	N	N	0	2	3
6	0	4	4	2	4	4	N	N	N	0	3	3
7	0	3	4	2	3	4	2	5	4	0	3	3
8	0	2	3	1	2	4	N	N	N	0	2	3
9	0	5	3	1	3	4	0	3	4	0	3	3
10	0	3	4	N	N	N	N	N	N	0	2	3
11	0	3	3	1	3	4	N	N	N	0	2	3
12	0	3	3	1	3	3	N	N	N	0	2	3
13	0	3	3	N	N	N	N	N	N	0	2	3
14	0	4	3	N	N	N	N	N	N	0	2	3
15	0	4	3	2	4	3	N	N	N	0	4	3
16	0	4	3	N	N	N	4	7	9	0	7	3
17	0	7	3	2	7	3	5	8	9	0	6	3
18	0	7	3	3	6	3	N	N	N	0	2	4
19	0	3	3	N	N	N	N	N	N	0	2	3
20	0	3	3	1	4	3	N	N	N	0	2	3
21	0	4	3	1	4	3	N	N	N	0	3	3
22	0	4	3	1	3	3	N	N	N	0	2	3
23	0	3	3	1	3	3	1	2	4	0	2	3
24	0	4	3	4	6	4	7	8	4	0	4	3
25	0	4	3	0	3	3	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N
31	N	N	N	N	N	N	N	N	N	N	N	N

*********************** SECOND INVERSION **

DAY	0000-0600 MST BASE (100M)	TOP (100M)	TYPE *	0601-1200 MST BASE (100M)	TOP (100M)	TYPE *	1201-1800 MST BASE (100M)	TOP (100M)	TYPE *	1801-2400 MST BASE (100M)	TOP (100M)	TYPE *
1	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	N	N	N	N	N	N
3	N	N	N	N	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	N	N	N	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	N	N	N
15	N	N	N	N	N	N	N	N	N	N	N	N
16	N	N	N	N	N	N	N	N	N	N	N	N
17	9	9	9	N	N	N	N	N	N	N	N	N
18	N	N	N	N	N	N	N	N	N	N	N	N
19	N	N	N	N	N	N	N	N	N	N	N	N
20	N	N	N	N	N	N	N	N	N	N	N	N
21	N	N	N	N	N	N	N	N	N	N	N	N
22	N	N	N	N	N	N	N	N	N	N	N	N
23	N	N	N	N	N	N	N	N	N	N	N	N
24	N	N	N	N	N	N	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N
31	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL,2=SUBSIDENCE,3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                          ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                           MONTH OF MAY       1980

       ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)   SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST ---------------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0        0
 101-300      9      0      0      0      0      0      0      0      0      0        9
 301-500     11      0      0      0      0      0      0      0      0      0       11
 501-900      5      0      0      0      0      0      0      0      0      0        5
NO INVERSION                                                                           6

  TOTAL      25      0      0      0      0      0      0      0      0      0       31

---TIME  601-1200 MST ---------------------------------------------------------------------

 001-100      0      1      1      0      0      0      0      0      0      0        2
 101-300      1      8      4      1      1      0      0      0      0      0       15
 301-500      0      0      3      0      0      0      0      0      0      0        3
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                          11

  TOTAL       1      9      8      1      1      0      0      0      0      0       31

---TIME 1201-1800 MST ---------------------------------------------------------------------

 001-100      0      1      0      0      0      0      0      1      0      0        2
 101-300      1      0      1      0      1      1      0      0      0      0        4
 301-500      0      0      0      0      0      0      0      0      0      0        0
 501-900      0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                          25

  TOTAL       1      1      1      0      1      1      0      1      0      0       31

---TIME 1801-2400 MST ---------------------------------------------------------------------

 001-100      0      0      0      0      0      0      0      0      0      0        0
 101-300     19      0      0      0      0      0      0      0      0      0       19
 301-500      3      0      0      0      0      0      0      0      0      0        3
 501-900      2      0      0      0      0      0      0      0      0      0        2
NO INVERSION                                                                           7

  TOTAL      24      0      0      0      0      0      0      0      0      0       31


----------------- FREQUENCY SUMMARY FOR FIRST INVERSION ------------------------------------

 001-100      0      2      1      0      0      0      0      1      0      0        4
 101-300     30      8      5      1      2      1      0      0      0      0       47
 301-500     14      0      3      0      0      0      0      0      0      0       17
 501-900      7      0      0      0      0      0      0      0      0      0        7
NO INVERSION                                                                          49

  TOTAL      51     10      9      1      2      1      0      1      0      0      124
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                              ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                         MONTH OF MAY       1980

       ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL

---TIME    0- 600 MST --------------------------------------------------------------------

 001-100       0      0      0      0      0      0      0      0      0      1      1
 101-300       0      0      0      0      0      0      0      0      0      0      0
 301-500       0      0      0      0      0      0      0      0      0      0      0
 501-900       0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                         30

  TOTAL        0      0      0      0      0      0      0      0      0      1     31

---TIME  601-1200 MST --------------------------------------------------------------------

 001-100       0      0      0      0      0      0      0      0      0      0      0
 101-300       0      0      0      0      0      0      0      0      0      0      0
 301-500       0      0      0      0      0      0      0      0      0      0      0
 501-900       0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                         31

  TOTAL        0      0      0      0      0      0      0      0      0      0     31

---TIME 1201-1800 MST --------------------------------------------------------------------

 001-100       0      0      0      0      0      0      0      0      0      0      0
 101-300       0      0      0      0      0      0      0      0      0      0      0
 301-500       0      0      0      0      0      0      0      0      0      0      0
 501-900       0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                         31

  TOTAL        0      0      0      0      0      0      0      0      0      0     31

---TIME 1801-2400 MST --------------------------------------------------------------------

 001-100       0      0      0      0      0      0      0      0      0      0      0
 101-300       0      0      0      0      0      0      0      0      0      0      0
 301-500       0      0      0      0      0      0      0      0      0      0      0
 501-900       0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                         31

  TOTAL        0      0      0      0      0      0      0      0      0      0     31


---------------- FREQUENCY SUMMARY FOR SECOND INVERSION ---------------------

 001-100       0      0      0      0      0      0      0      0      0      1      1
 101-300       0      0      0      0      0      0      0      0      0      0      0
 301-500       0      0      0      0      0      0      0      0      0      0      0
 501-900       0      0      0      0      0      0      0      0      0      0      0
NO INVERSION                                                                        123

  TOTAL        0      0      0      0      0      0      0      0      0      1    124
```

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF MAY 1980

********* TWO HOUR STABILITY ANALYSIS **************************

	HOUR											
DAY	02	04	06	08	10	12	14	16	18	20	22	24
1	E	F	F	F	D	B	B	C	C	D	F	F
2	F	E	E	D	C	C	C	C	E	E	D	F
3	E	E	E	D	C	C	C	C	C	D	F	F
4	F	F	F	D	C	C	C	C	C	D	F	F
5	F	E	E	D	C	C	B	B	C	D	F	F
6	E	E	E	D	C	C	C	C	E	D	D	D
7	D	D	D	D	D	C	C	C	D	E	F	E
8	E	E	E	D	B	B	C	C	C	D	F	F
9	F	E	E	E	D	C	E	E	E	D	E	E
10	E	E	D	C	C	D	C	C	C	F	E	E
11	F	F	F	D	C	C	C	C	C	C	F	F
12	F	F	F	D	C	C	C	B	C	F	E	E
13	F	F	F	D	C	C	C	C	C	E	F	F
14	F	F	F	D	B	B	C	C	C	E	F	F
15	F	F	F	D	C	C	C	C	D	D	E	E
16	E	E	E	D	C	C	C	C	C	F	F	F
17	F	E	E	D	C	C	C	C	C	B	F	F
18	F	F	F	D	C	C	C	C	C	F	F	F
19	E	E	E	D	C	C	C	C	C	D	F	F
20	E	E	E	D	C	C	C	C	D	E	F	E
21	E	E	E	E	D	B	C	C	D	E	E	F
22	E	E	E	D	C	C	C	D	C	D	D	D
23	D	D	D	D	D	D	D	D	D	D	D	D
24	D	E	D	B	B	B	B	C	C	D	F	E
25	E	E	E	E	D	C	C	M	M	M	M	M
26	M	M	M	M	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	M	M	M	M	M	M	M	M	M	M
31	M	M	M	M	M	M	M	M	M	M	M	M

PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

A= 0.0 % B= 4.0 % C=24.5 % D=16.9 % E=19.9 % F=14.0 %

U= 0.0 % M=20.7 %

NOTE: U=UNKNOWN M=MISSING DATA
CLOUD COVER CONDITIONS USED FROM NWS STATION AT KALISPELL
WIND DATA USED FROM NWS STATION AT KALISPELL

ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY MONTH OF JUNE 1980

FIRST INVERSION

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	2	3	9	0	3	3
3	0	4	3	N	N	N	N	N	N	0	2	3
4	0	5	3	1	4	3	N	N	N	0	4	3
5	0	4	3	1	3	3	N	N	N	0	3	3
6	0	3	3	1	2	3	N	N	N	N	N	N
7	0	4	3	3	5	3	N	N	N	0	3	3
8	0	4	3	1	5	3	N	N	N	0	2	3
9	0	5	3	1	3	3	N	N	N	0	4	3
10	0	5	3	1	4	3	0	5	3	0	5	3
11	0	4	3	1	4	3	N	N	N	0	3	3
12	0	5	3	0	3	3	N	N	N	0	2	3
13	0	2	4	1	3	4	3	4	4	0	1	3
14	0	4	3	1	4	3	2	3	3	0	6	3
15	0	4	3	3	6	3	5	6	3	0	5	3
16	0	5	3	1	5	3	N	N	N	1	4	3
17	0	6	3	0	4	3	N	N	N	0	2	3
18	0	4	3	1	3	3	N	N	N	0	3	3
19	0	5	3	1	3	3	N	N	N	0	2	3
20	0	5	3	2	5	3	4	5	4	0	3	3
21	0	5	3	1	3	3	N	N	N	0	3	3
22	0	6	3	2	7	3	N	N	N	0	3	3
23	0	4	3	1	3	3	0	2	4	0	3	4
24	0	4	3	N	N	N	N	N	N	0	3	3
25	0	5	3	1	4	3	N	N	N	0	3	3
26	0	6	3	2	7	3	3	6	4	0	3	3
27	0	3	3	N	N	N	N	N	N	0	3	3
28	0	3	3	1	4	3	N	N	N	0	2	3
29	0	6	3	1	6	3	N	N	N	0	2	3
30	0	4	3	1	3	3	N	N	N	0	2	3

SECOND INVERSION

DAY	0000-0600 MST			0601-1200 MST			1201-1800 MST			1801-2400 MST		
	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *	BASE (100M)	TOP (100M)	TYPE *
1	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	N	N	N	N	N	N
3	N	N	N	N	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N	N	N
12	N	N	N	N	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N	N	N
14	N	N	N	6	8	3	5	7	3	N	N	N
15	N	N	N	N	N	N	N	N	N	N	N	N
16	N	N	N	N	N	N	N	N	N	N	N	N
17	N	N	N	N	N	N	N	N	N	N	N	N
18	N	N	N	N	N	N	N	N	N	N	N	N
19	N	N	N	N	N	N	N	N	N	N	N	N
20	N	N	N	N	N	N	N	N	N	N	N	N
21	N	N	N	N	N	N	N	N	N	N	N	N
22	N	N	N	N	N	N	N	N	N	N	N	N
23	N	N	N	N	N	N	N	N	N	N	N	N
24	N	N	N	N	N	N	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: FOR TYPE 1=FRONTAL, 2=SUBSIDENCE, 3=RADIATION (SPIKED ECHO)
4=RADIATION (LAMINAR ECHO) 9=UNKNOWN
N=NO INVERSION M=MISSING DATA OR UNKNOWN

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                         ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                      MONTH OF JUNE     1980

      ******* FIRST INVERSION FREQUENCY OF OCCURENCE TABLE *******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC   100   200   300   400   500   600   700   800   900   TOTAL

---TIME    0- 600 MST --------------------------------------------------------

 001-100     0     0     0     0     0     0     0     0     0     0      0
 101-300     4     0     0     0     0     0     0     0     0     0      4
 301-500    20     0     0     0     0     0     0     0     0     0     20
 501-900     4     0     0     0     0     0     0     0     0     0      4
NO INVERSION                                                              2

  TOTAL     28     0     0     0     0     0     0     0     0     0     30

---TIME  601-1200 MST --------------------------------------------------------

 001-100     0     1     0     0     0     0     0     0     0     0      1
 101-300     1    14     1     2     0     0     0     0     0     0     18
 301-500     1     3     2     0     0     0     0     0     0     0      6
 501-900     0     0     0     0     0     0     0     0     0     0      0
NO INVERSION                                                              5

  TOTAL      2    18     3     2     0     0     0     0     0     0     30

---TIME 1201-1800 MST --------------------------------------------------------

 001-100     0     0     2     1     1     1     0     0     0     0      5
 101-300     1     0     0     1     0     0     0     0     0     0      2
 301-500     1     0     0     0     0     0     0     0     0     0      1
 501-900     0     0     0     0     0     0     0     0     0     0      0
NO INVERSION                                                             22

  TOTAL      2     0     2     2     1     1     0     0     0     0     30

---TIME 1801-2400 MST --------------------------------------------------------

 001-100     1     0     0     0     0     0     0     0     0     0      1
 101-300    21     1     0     0     0     0     0     0     0     0     22
 301-500     4     0     0     0     0     0     0     0     0     0      4
 501-900     1     0     0     0     0     0     0     0     0     0      1
NO INVERSION                                                              2

  TOTAL     27     1     0     0     0     0     0     0     0     0     30


----------------- FREQUENCY SUMMARY FOR FIRST INVERSION ----------------------

 001-100     1     1     2     1     1     1     0     0     0     0      7
 101-300    27    15     1     3     0     0     0     0     0     0     46
 301-500    26     3     2     0     0     0     0     0     0     0     31
 501-900     5     0     0     0     0     0     0     0     0     0      5
NO INVERSION                                                             31

  TOTAL     59    19     5     4     1     1     0     0     0     0    120
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                         ACOUSTIC RADAR ANALYSIS

FLATHEAD ENVIRONMENTAL STUDY                         MONTH OF JUNE     1980

      ******* SECOND INVERSION FREQUENCY OF OCCURENCE TABLE ******

THICKNESS          INVERSION BASE HEIGHT (IN METERS)
 (METERS)  SFC    100    200    300    400    500    600    700    800    900    TOTAL
---TIME     0- 600 MST -----------------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        30

  TOTAL      0      0      0      0      0      0      0      0      0      0       30
---TIME   601-1200 MST -----------------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      0      1      0      0      0        1
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        29

  TOTAL      0      0      0      0      0      0      1      0      0      0       30
---TIME  1201-1800 MST -----------------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      1      0      0      0      0        1
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        29

  TOTAL      0      0      0      0      0      1      0      0      0      0       30
---TIME  1801-2400 MST -----------------------------------------------------------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      0      0      0      0      0        0
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                        30

  TOTAL      0      0      0      0      0      0      0      0      0      0       30


---------------- FREQUENCY SUMMARY FOR SECOND INVERSION ---------------------

 001-100     0      0      0      0      0      0      0      0      0      0        0
 101-300     0      0      0      0      0      1      1      0      0      0        2
 301-500     0      0      0      0      0      0      0      0      0      0        0
 501-900     0      0      0      0      0      0      0      0      0      0        0
NO INVERSION                                                                       118

  TOTAL      0      0      0      0      0      1      1      0      0      0      120
```

```
                          ACOUSTIC RADAR ANALYSIS
FLATHEAD ENVIRONMENTAL STUDY                         MONTH OF JUNE     1980

********* TWO HOUR STABILITY ANALYSIS ***************************
          -------------------- HOUR ------------------------------
DAY   02   04   06   08   10   12   14   16   18   20   22   24
  1    M    M    M    M    M    M    M    M    M    M    M    M
  2    M    M    M    M    M    M    D    C    C    E    F    F
  3    E    E    F    D    D    D    D    C    C    D    F    F
  4    F    F    F    D    C    C    C    C    C    D    F    F
  5    F    F    F    D    B    B    C    C    C    D    E    E
  6    D    D    D    D    C    C    C    M    M    M    M    M
  7    F    E    E    C    D    A    C    B    B    D    F    F
  8    F    E    E    C    D    A    B    C    C    D    F    F
  9    F    E    E    C    C    D    C    C    E    E    F    E
 10    F    F    F    C    D    B    C    C    E    E    F    E
 11    E    E    E    E    D    C    D    D    B    D    E    F
 12    E    E    E    E    E    D    C    C    D    E    E    E
 13    D    D    D    D    C    C    C    B    B    C    D    D
 14    E    F    F    B    D    A    C    C    D    D    E    E
 15    D    E    E    D    C    C    C    C    E    E    F    D
 16    E    E    E    B    D    A    C    C    C    D    F    F
 17    F    F    F    E    D    B    C    C    D    E    F    F
 18    F    F    F    C    D    C    C    C    D    D    E    E
 19    F    E    E    C    D    C    C    C    C    F    F    F
 20    F    E    E    C    C    B    B    D    E    E    E    E
 21    E    F    F    B    D    C    C    C    C    E    F    F
 22    D    E    E    E    C    D    D    C    C    E    F    E
 23    E    E    E    E    D    C    C    E    E    E    F    F
 24    F    F    F    D    C    C    C    C    D    D    E    E
 25    E    E    E    E    E    D    C    C    C    D    F    F
 26    E    E    E    C    E    D    B    D    C    D    D    D
 27    E    E    E    D    D    D    D    D    D    E    E    E
 28    E    F    F    C    D    C    C    C    D    F    F    F
 29    F    E    E    C    C    D    C    C    C    E    F    F
 30    F    F    F    F    D    C    C    C    C    D    F    F

               PERCENT FREQUENCY OF OCCURENCE FOR EACH CATEGORY

     A= 1.1 %   B= 4.4 %   C=24.2 %   D=20.3 %   E=25.6 %   F=18.1 %

     U= 0.0 %   M= 6.4 %

 NOTE: U=UNKNOWN M=MISSING DATA
       CLOUD COVER CONDITIONS USED FROM NWS STATION  AT KALISPELL
       WIND DATA USED FROM NWS STATION AT KALISPELL
```

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